

C9850hn/C9850hdn

User's Guide

Copyright Information

Copyright © 2008 by Oki Data. All Rights Reserved

Document Information

C9850 User's Guide

P/N 59308301

Revision 1.0

February, 2008

Disclaimer

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer .

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the web site:

<http://www.okiprintingsolutions.com>

Trademark Information

Oki and Microline are registered trademarks of Oki Electric Industry Company Ltd. EFI, Fiery, the Fiery logo and Spot-On are registered trademarks of Electronics for Imaging, Inc.

Apple, Macintosh and Mac OS are registered trademarks of Apple Computers Inc. Hewlett-Packard, HP, and LaserJet are registered trademarks of Hewlett-Packard Company.

Microsoft, MS-DOS and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other product names and brand names are registered trademarks or trademarks of their proprietors.

CONTENTS

Notes, cautions and warnings!	7
Introduction	8
Features	9
About this guide	10
Online usage	13
Printing pages	14
Printer and paper overview	15
Opening and closing the top cover	15
Identifying major components	16
Software supplied	21
Paper recommendations	22
Paper input and output information.	23
Trays and stackers	24
Trays 1 to 5.	24
MP tray	24
Face-down stacker	25
Face-up stacker	25
Duplex unit t	25
Tray and stacker examples	26
Loading Trays 1 to 5.	26
Using the MP Tray	28
Using the stackers	30
Control panel.	32
Buttons and lights.	32
Display Panel messages	34
Status information	34
Menu (Functions) information	34
Configuration information	35
Help mode.	35
Display Panel messages	35
Using the menus	35
Getting started	37
Printer location	37
Turning Off/On	38
Turning Off	38
Turning On	39
Checking current settings	40
Interfaces and connection	40
Connecting the USB interface	41
Connecting the network interface.	41

Using the Drivers CD.	42
OPERATION.	43
How to access the driver screens	43
Changing the driver defaults	43
Windows XP/2000	43
Windows Vista	44
Changing the application's driver settings	44
Driver settings	44
Saving a set of driver settings	45
Recalling saved driver settings	45
Setting the driver device options	46
Printing black	47
Black generation.	47
Composite black.	47
Pure black.	47
How to choose composite black or pure black	48
PCL	48
PCL 6	48
color matching	49
Factors that affect color printing.	49
Monitor colors vs. printer colors	49
Monitor settings	50
Software settings	51
How the application displays color	51
Printer driver settings	51
Lighting (Viewing) conditions	51
Paper type.	51
How to perform color matching	52
Descriptions.	52
How to use	52
Rendering intents	53
Brightness and saturation	53
Matching specific colors.	54
Print resolution	55
How to use	55
Finishing options.	56
Booklet printing	57
Activating Booklet Printing	57
Collating	59
Printing collated documents.	60
Separating queued print jobs.	61

Cover print	62
How to use cover print	62
Custom page size	63
How to create, edit, and delete a custom page size.	63
Selecting a custom page size.	64
Duplex (double-sided) printing	65
Activating duplex printing	66
Printing multiple pages on one sheet (N-up)	67
How to Print Multiple Pages on One Sheet	68
Poster printing	69
Printing Posters	69
Fit to page.	71
How to use	71
Watermarks.	72
How to create a new watermark.	72
How to choose a previously created watermark	72
How to edit an existing watermark.	73
Secure printing	74
Sending the document	75
Printing the document.	77
Deleting a secure print document.	78
Font Substitution	79
How to use	79
Consumables and maintenance	80
Checking consumable/maintenance item usage	80
Replacement indications	80
Consumable item order information	81
Maintenance item order details.	81
Replacing consumables/maintenance items	82
Cleaning the LED heads.	82
Cleaning the paper feed rollers.	84
Cleaning the printer casing	87
Emptying the punch chip box (Punch unit optional accessory).	88
Optional accessories	91
Accessory order information.	91
Installing accessories	91
Troubleshooting	92
Paper jams – printer	92
Open cover, paper jam, ttttt side cover	92
Open cover, paper jam, side cover.	94

Open cover, paper jam, top cover	96
Paper jams – duplex unit.	101
Check duplex unit, paper jam	101
Paper jams – Finisher (optional accessory)	107
Check Finisher, paper jam/paper remains	107
591, 592, 593, 599/ 643, 645 (paper jam around Finisher).	107
594, 597, 598/ 644, 646 (paper jam in Finisher)	109
590 (paper jam in Finisher/Punch unit).	114
Check Inverter, paper jam	116
Avoiding paper jams	121
Dealing with unsatisfactory printing	122
Staple jams – Finisher (optional accessory)	124
Check Finisher, Staple Jam	124
Specifications	129
Appendix A – Display Panel Messages	131
Appendix B – Menu system	133
Configuration	134
Print Page Count	134
Finisher Count	134
Supplies Life	135
Network	135
Paper Size in Tray	136
System	136
Configuration example – monochrome pages printed.	137
Print Pages	138
Print Information example – demonstration page	138
Print Secure Job	139
Menus	140
Tray Configuration	140
System Adjust	144
Menus example 1 – Tray 1 transparencies.	148
Menus example 2 – MP Tray paper size.	149
Oki service centers	150
Authorized Service Providers	150
Oki Data Contact Locations	150

NOTES, CAUTIONS AND WARNINGS!

NOTE

A note provides additional information to supplement the main text.

CAUTION!

A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING!

A warning provides additional information which, if ignored, may result in a risk of personal injury.

INTRODUCTION

Congratulations on buying an Oki color printer. Your new printer is designed with advanced features to give you clear, vibrant color prints and crisp black and white pages at high speed on a range of print media for the office.

In addition, the EFI Fiery print control and job management functionality allows you to:

- > manage or preview jobs in the print queue through either your web browser or software
- > balance the workflow of networked devices
- > manage color profiles
- > save templates on the hard disk for faster processing and printing of jobs like Powerpoint presentations and double-sided documents

This user's guide describes the C9850hn and C9850hdn, where h denoted hard disk installed, d denotes duplex unit installed, and n denotes networking capability.

FEATURES

The following features are standard on all models:

- > Up to 36 pages per minute in full color for fast printing of high impact color presentations and other documents
- > Up to 40 pages per minute in black and white for fast and efficient printing of all general purpose documents not requiring color
- > ProQ4800 Multilevel technology produces subtler tones and smoother gradations of color to lend photographic quality to your documents
- > 1200 x 1200 dpi (dots per inch) print resolution for high quality image production showing the finest detail
- > Single Pass Color Digital LED technology for high speed processing of your printed pages
- > 10Base-T and 100Base-TX network connection lets you share this valuable resource among users on your office network
- > Automatic two-sided (duplex) printing for economical use of paper and compact printing of larger documents (C9850hdn)
- > Hard Disk Drive enables spooled and verified printing
- > USB 2.0 interface
- > PCL, PS, emulations and PDF Direct Printing
- > EFI Fiery controller and software
- > Graphics Arts capability with full suite of EFI utilities including Spot-On and Hot Folder support

Additionally, the following optional features are available:

- > Additional paper trays for loading a further 530 sheets at a time to minimize operator intervention, or different paper stocks for letterhead stationery, alternative paper sizes or other print media:
- > 2nd/3rd Tray (530 sheets each)
- > High Capacity Feeder (HCF) (1590 sheets)

NOTE

Tray configurations are: Tray 1 only, Tray 1 + 2nd Tray, Tray 1 + 2nd Tray + 3rd Tray, Tray 1 + HCF, Tray 1 + 2nd Tray + HCF

- > Duplex unit for the C9850hn
- > Finisher for stapling or saddle stitching printer output
- > Punch unit (to extend Finisher functionality)

ABOUT THIS GUIDE

NOTE

Images used in this manual may include optional features that your printer does not have installed. Also, they may omit features not essential to the description of a particular function.

This manual is your user's guide (check the web site, my.okidata.com, for the most up-to-date version) for your printer and forms part of the overall user support listed below:

- > **Set-up Poster:** for quick step by step visual setup of your printer.

This is a paper document that is packaged with the printer.

- > **Set-up guide:** to describe how to unpack, connect and turn on your printer.

This is a paper document that is packaged with the printer.

- > This **User's Guide:** to help you to become familiar with your printer and make the best use of its many features. Also included are guidelines for troubleshooting and maintenance to ensure that it performs at its best.
- > Additionally, information is provided for adding optional accessories as your printing needs evolve.

This is an electronic document stored on Printer Driver and Utilities CD.

> **EFI Fiery® documentation suite**

- > These documents include information for users and systems administrators utilizing the EFI Fiery Network Controller for the C9850.

These are electronic documents stored on the Printer Driver and Utility CD and on our web site (check the web site, my.okidata.com).

- > **Configuration and Setup Guide:** to provide machine configuration and network configuration information
- > **EFI Printing from Windows:** Describes how to install the printer driver on Windows, establish printing connections for different networks.
- > **EFI Printing from Mac OS:** describes how to install the printer driver on a Mac and print from Mac applications.
- > **EFI Print Options:** describes print options and features that you access from the printer driver and from Command Workstation job overrides.
- > **EFI Utilities:** describes how to scan and how to install, configure, and use the software utilities.
- > **EFI Color Printing:** explains how to manage color output. Provides information about ColorWise Pro Tools, including how to calibrate the printer and set ColorWise print options.
- > **EFI Fiery Color References:** provides an overview of color management concepts and workflows, and describes how to manage color from various applications.
- > **EFI Workflow Examples:** explains complicated printing scenarios and provides cross-references to relevant information in the documentation set.
- > **EFI Variable Data Printing:** supplements information in workflow examples with reference information about Variable Data Printing. Also provides an overview of FreeForm.

- > **Installation Guides:** accompany consumable items and optional accessories to describe how to install them.

These are paper documents that are packaged with the consumables and optional accessories.

- > **Online Help:** online information accessible from the printer driver and utility software.

ONLINE USAGE

This guide is intended to be read on screen using an Adobe Acrobat Reader. Use the navigation and viewing tools provided in Acrobat.

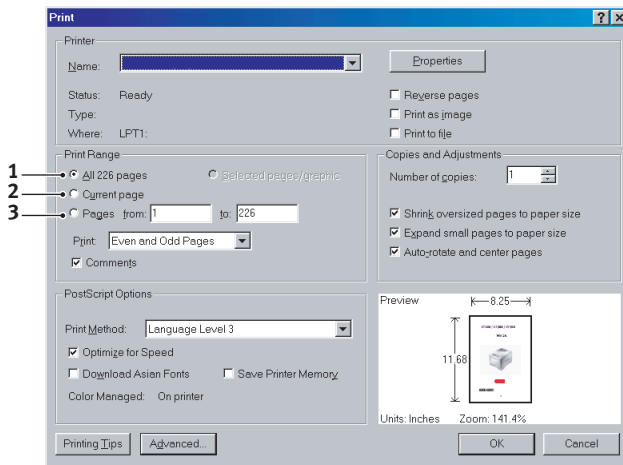
You can access specific information in two ways:

- > In the list of bookmarks down the left hand side of your screen, click on the topic of interest to jump to the required topic. (If the bookmarks are not available, use the ["Contents" on page 3.](#))
- > In the list of bookmarks, click on Index to jump to the Index. (If the bookmarks are not available, use the ["Contents" on page 3.](#)) Find the term of interest in the alphabetically arranged index and click on the associated page number to jump to the page containing the term.

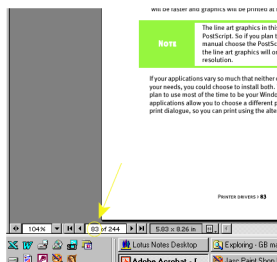
PRINTING PAGES

The whole manual, individual pages, or sections may be printed. The procedure is:

1. From the toolbar, select [File], then [Print] (or press the Ctrl + P keys).
2. Choose which pages you wish to print:
 - (a) [All pages], (1), for the entire manual.
 - (b) [Current page], (2), for the page at which you are looking.



- (c) [Pages from] and [to], (3), for the range of pages you specify by entering their page numbers.

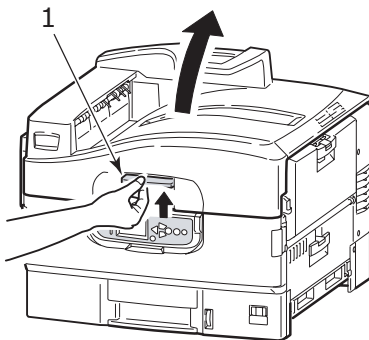


3. Click on [OK].

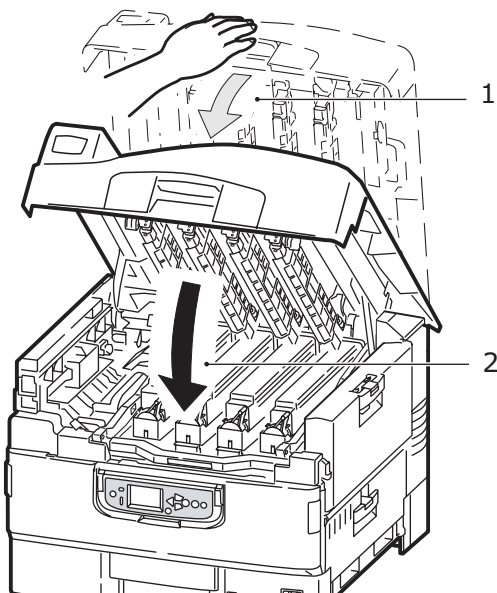
PRINTER AND PAPER OVERVIEW

OPENING AND CLOSING THE TOP COVER

To open the top cover, squeeze the top cover handle (1) to release the catch and raise the cover.



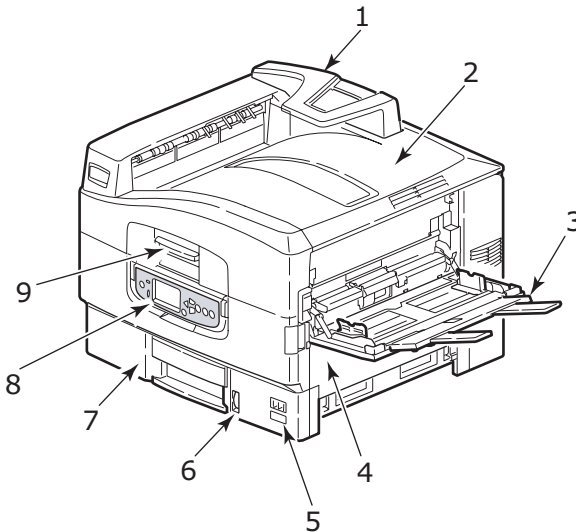
To close the top cover, push gently (1) until the cover stops midway and then push harder (2) to close the cover completely. Ensure that the cover is securely closed.



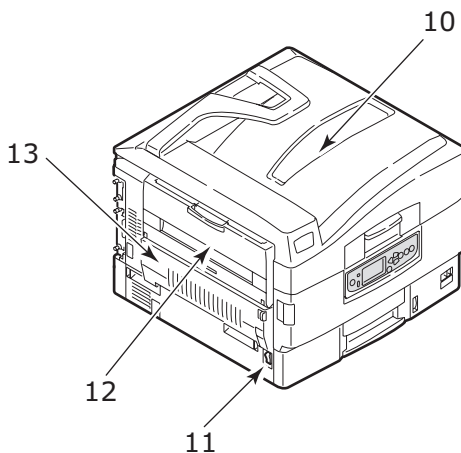
IDENTIFYING MAJOR COMPONENTS

The major components of your printer are identified in the graphics below.

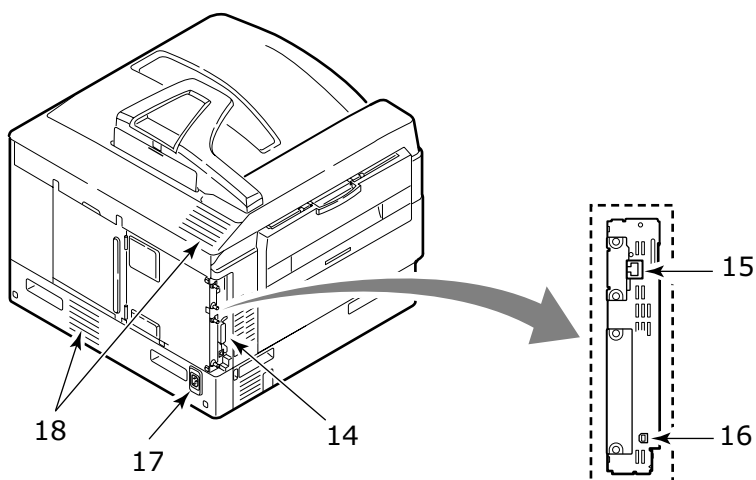
1. Paper holding arm
2. Top cover (face-down stacker)
3. MP Tray (multi-purpose tray)
4. Tray 1 side cover
5. Paper size label
6. Paper gauge
7. Tray 1 (paper tray)
8. Control panel
9. Top cover handle



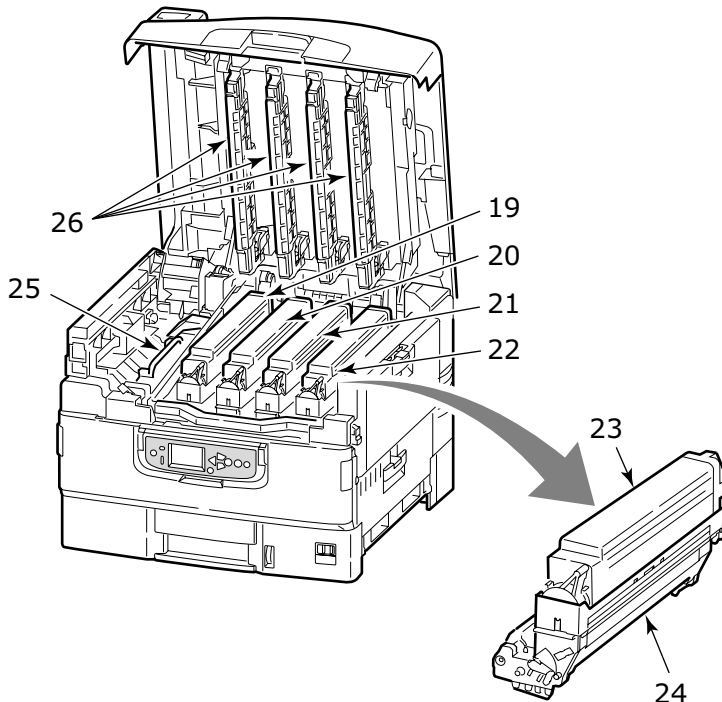
- 10.** Face-down stacker
- 11.** Power (on/off) switch
- 12.** Face-up stacker
- 13.** Duplex unit



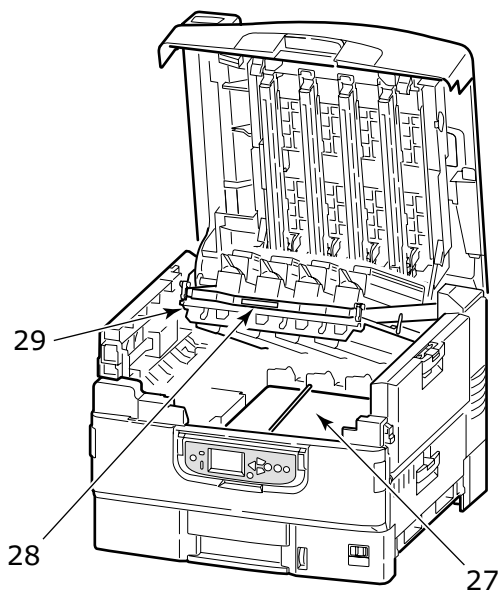
- 14.** Interface unit
- 15.** Network interface connector
- 16.** USB interface connector
- 17.** Power connector
- 18.** Ventilation openings



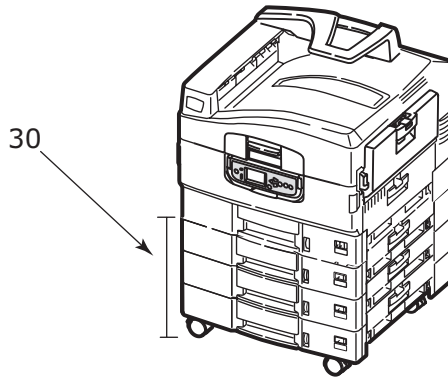
- 19.** Image drum cartridge and toner cartridge (Cyan)
- 20.** Image drum cartridge and toner cartridge (Magenta)
- 21.** Image drum cartridge and toner cartridge (Yellow)
- 22.** Image drum cartridge and toner cartridge (Black)
- 23.** Toner cartridge
- 24.** Image drum cartridge
- 25.** Fuser unit
- 26.** LED heads



- 27.** Belt unit
- 28.** Drum basket handle
- 29.** Drum basket



30. High capacity Feeder (HCF) 3 trays (Optional).



SOFTWARE SUPPLIED

CDs:

> **Printer Drivers**

Contains PCL and PS drivers, utilities and productivity software for the PCL driver.

> **EFI Utilities**

Contains utilities for use with the EFI Fiery driver

PAPER RECOMMENDATIONS

Your printer will handle a variety of print media, including a range of paper weights and sizes, transparencies and envelopes. This section provides general advice on choice of media, and explains how to use each type.

The best performance will be obtained when using standard weight 20 – 24 lb (75 – 90 g/m²) paper designed for use in copiers and laser printers. Suitable types are:

- > OKI® Bright White, 32 lb US Bond
- > HammerMill® Laser Print Radiant, White, 24 lb US Bond
- > Xerox® 4024, 20lb US Bond

Use of heavily embossed or very rough textured paper is not recommended.

Pre-printed stationery can be used, but the ink must not offset when exposed to the high fuser temperatures used in the printing process.

Envelopes should be free from twist, curl or other deformations. They should also be of the rectangular flap type, with glue that remains intact when subjected to hot roll pressure fusing used in this type of printer. Window envelopes are not suitable.

Transparencies should be of the type designed for use in copiers and laser printers. In particular, avoid office transparencies designed for use by hand with marker pens. These will melt in the fuser and cause damage.

Labels should also be of the type recommended for use in copiers and laser printers, in which the base carrier page is entirely covered by labels. Other types of label stock may damage the printer due to the labels peeling off during the printing process. Suitable types are:

- > Avery White Laser Label types 7162, 7664, 7666 (A4), or 5161 (Letter)

PAPER INPUT AND OUTPUT INFORMATION

The following table relates paper parameters to input trays (Tray 1 to Tray 5 (numbering from the top) and MP Tray) and to output areas (Face-down stacker and Face-up stacker).

TYPE	SIZE	WEIGHT	INPUT/ OUTPUT
Plain paper	A3, A3 Nobi, A3 Wide, A4, A5, A6, B4, B5, Letter, Legal 13, Legal 13.5, Legal 14, Executive, Tabloid, Tabloid Extra	17 – 57 lb	Any Tray Any Stacker
	Custom W: 3.94 – 12.91 in L: 5.82 – 18 in	17 – 57 lb	Any Tray Face-up Stacker
	Custom W: 3.12 – 12.91 in L: 3.54 – 18 in	15 – 71 lb	MP Tray Face-up Stacker
	Banner W: Letter width L: 18 – 48 in	34 lb recommended	MP Tray Face-up Stacker
	Index card: 3 x 5 in	15 – 71 lb	MP Tray Face-up Stacker
Postcard	–	–	Tray 1 or MP Tray Face-up Stacker
Envelope	4.72 x 9.25 in 3.54 x 8.07 in 9.25 x 4.72 in 9.25 x 4.13 in 9.45 x 13.07 in 8.50 x 10.91 in 4.69 x 7.76 in 8.27 x 11.69 in	23 lb	MP Tray Face-up Stacker
	12.76 x 9.02 in 9.02 x 6.38 in 8.66 x 4.33 in 8.88 x 3.88 in 9.5 x 4.13 in 7.5 x 3.88 in	Based on 24 lb paper	
Labels	A4, Letter, B5	0.004 – 0.008 in	MP Tray Face-up Stacker

TYPE	SIZE	WEIGHT	INPUT/ OUTPUT
Transparencies Glossy paper	A4, Letter	0.004 in	Tray 1 or MP Tray Face-up Stacker

TRAYS AND STACKERS

TRAYS 1 TO 5

Tray 1 is the standard blank paper input tray and can hold up to 530 sheets of 20 lb (75 g/m²) paper. Additional trays, to give a total of five, can be added as an option to give a total tray capacity of 2650 sheets of 20 lb (75 g/m²) paper.

If you have identical paper stock loaded in another tray (for example Tray 2 or the MP Tray), you can have the printer automatically switch to that other tray when the current tray runs out of paper. This function can be enabled by driver settings when printing from a Windows application or by a menu setting when printing from other applications.

MP TRAY

The multi-purpose tray is used for media sizes additional to those of the standard trays, heavier media weights and special media.

The multi-purpose tray can handle the same sizes as the standard trays but in weights up to 71.3 lb (268 g/m²). For very heavy paper stock use the face-up paper stacker. This ensures that the paper path through the printer is almost straight.

The multi-purpose tray can feed paper widths as small as 3in (76.2 mm) and lengths up to 47.24 in (1200 mm). For banner printing, recommended sizes are Letter wide, 35.43 in and 47.24 in long and weight 34 lb (128 g/m²).

Use the multi purpose tray for printing on envelopes and transparencies. Up to 100 sheets of transparencies or 25 envelopes can be loaded at one time, subject to a maximum stacking depth of 1 in.

Paper or transparencies should be loaded print side up and top edge into the printer. Do not use the duplex (two-sided printing) function for transparencies.

FACE-DOWN STACKER

The face-down stacker on the top of the printer can hold up to 500 sheets of 20 lb (80 g/m²) standard paper, and can handle paper stocks from 17 – 57 lb (64 – 216 g/m²). Pages printed in reading order (page 1 first) will be sorted in reading order (last page on top, facing down).

FACE-UP STACKER

The face-up stacker should be opened and the tray extension pulled out when required for use. (With the face-up stacker either open or closed, the driver setting of Face Down will successfully direct prints to the Face-Down stacker.)

The face-up stacker can hold up to 250 sheets of 20 lb (80 g/m²) standard paper and can handle stocks up to 71.3 lb (268 g/m²).

Always use this stacker and the multi-purpose feeder for paper stocks heavier than 57 lb (216 g/m²).

DUPLEX UNIT T

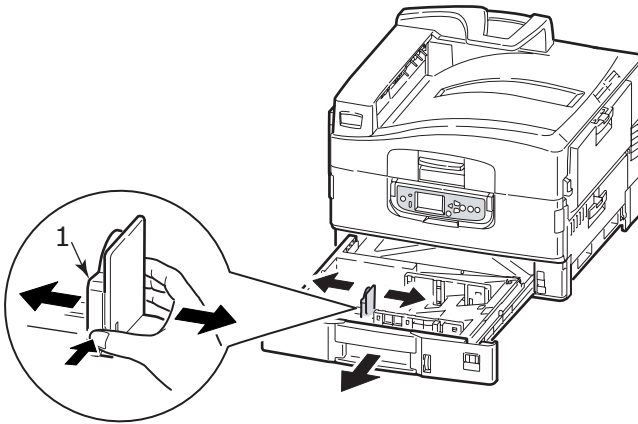
The duplex unit (C9850hdn models) provides automatic two-sided printing on plain paper fed from Trays 1 – 5 or the MP Tray. Applicable paper sizes are A6, A5, B5, B5LEF, Executive, A4, A4LEF, Letter, LetterLEF, Legal 13 in, Legal 13.5 in, Legal 14 in, B4, Tabloid, Tabloid Extra, A3, A3 Wide, A3 Nobi, Custom size (3.9 – 12.9 in wide, 5.8 – 18 in long), using paper stocks in the range 20 – 32 lb (75 – 120 g/m²).

TRAY AND STACKER EXAMPLES

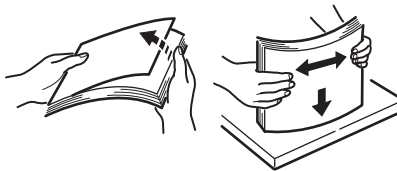
LOADING TRAYS 1 TO 5

Tray 1 is used in the following example.

1. Pull out the tray.
2. Press the paper rear stopper tab (1) and adjust the tab to the required paper size.



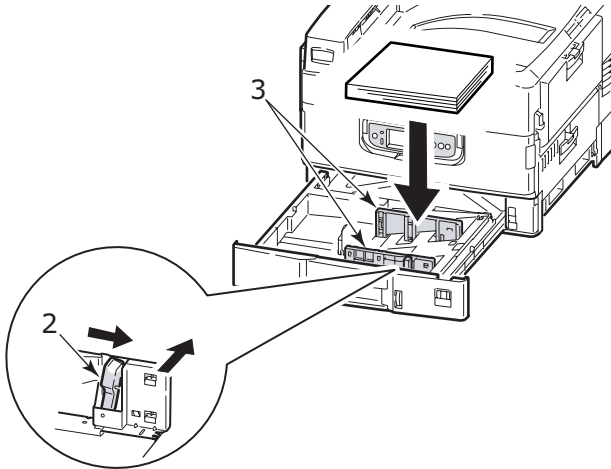
3. Fan the paper to be loaded then tap the edges of the stack on a flat surface to make it flush.



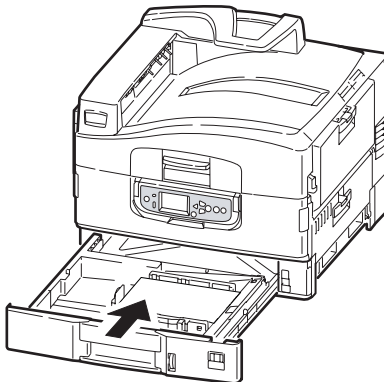
4. Load the paper (face down and top edge towards the right for letterhead paper), press the tab (2) on the paper guide and adjust the guides (3) for a snug fit to the paper.

To avoid paper jams:

- > Do not leave space between the paper and the guides and rear stopper.
- > Do not overfill the paper tray. Capacity depends on the paper type.
- > Do not load damaged paper.
- > Do not load paper of different sizes or types at the same time.

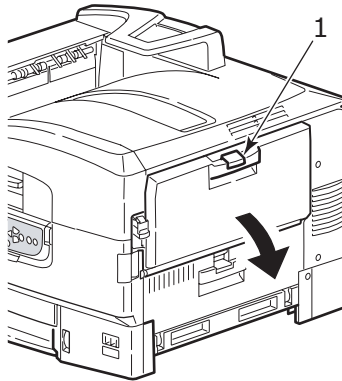


- 5.** Gently push the tray back into the printer.

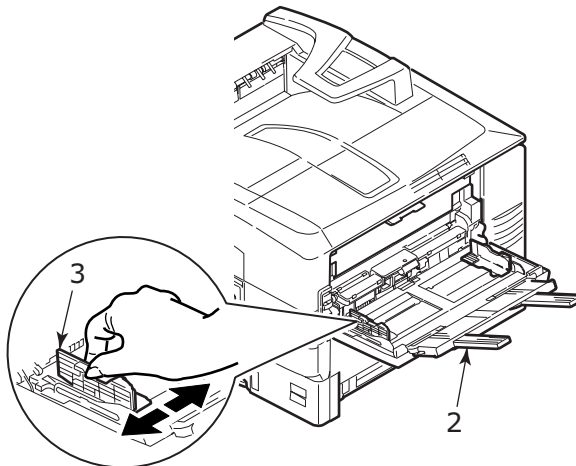


USING THE MP TRAY

1. Squeeze the handle (1) and open the multi-purpose tray.

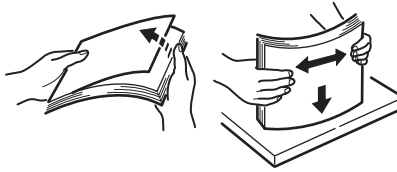


2. Fold out the paper support section and swivel out the extension supports (2).



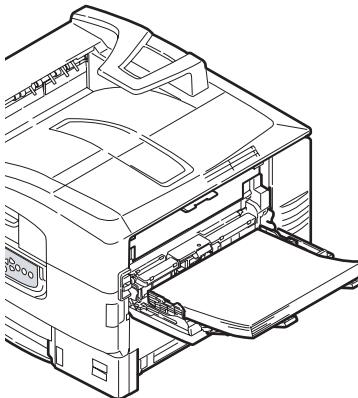
3. Adjust the paper guides (3) to the size of the paper being used.

- 4.** Fan the paper to be loaded then tap the edges of the stack on a flat surface to make it flush.



- 5.** Load the paper.

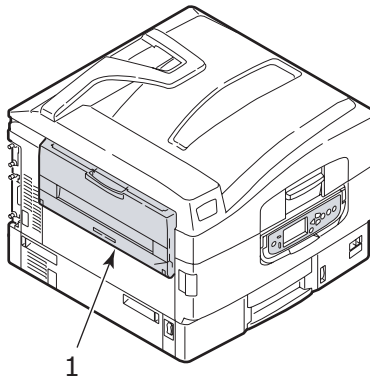
- > For single-sided printing on letterhead, load the paper into the multi-purpose tray with pre-printed side up and top edge into the printer.
- > For two-sided (duplex) printing on letterhead, load the paper with pre-printed side down and top edge away from the printer.
- > Envelopes should be loaded face-up with long edge into the printer. Do not select duplex printing on envelopes.
- > Do not leave space between the paper and the guides.
- > Do not exceed the paper capacity of approximately 230 sheets, 100 transparencies or 25 envelopes. Maximum stacking depth is 1in.



USING THE STACKERS

Face-down stacker

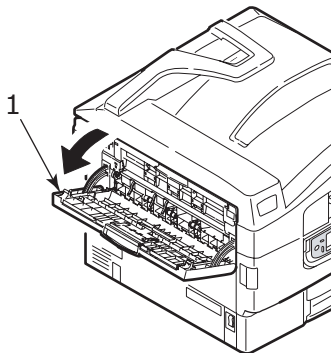
When the face-up stacker (1) on the left side of the printer is closed (its normal position), paper is ejected to the face-down stacker on the top of the printer.



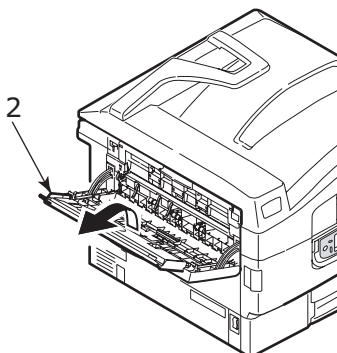
Face-up stacker

The face-up exit path is used for heavy paper (cardstock etc.), envelopes, transparencies, and labels.

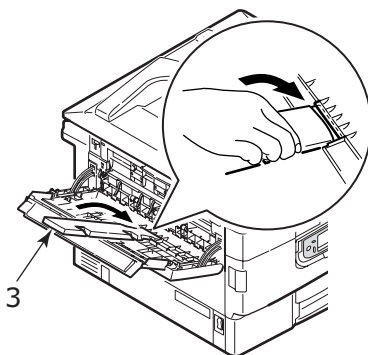
1. Open the stacker (1).



2. Flip out the paper support (2).

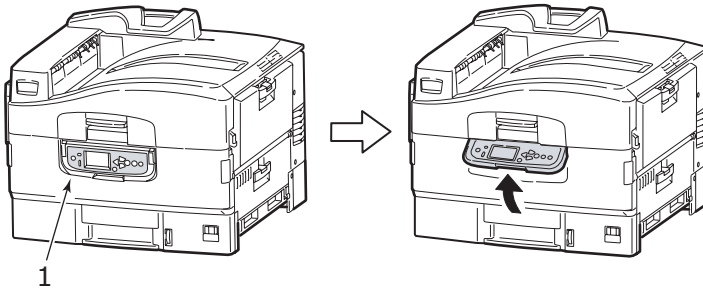


3. Swivel out the paper support extension (3).



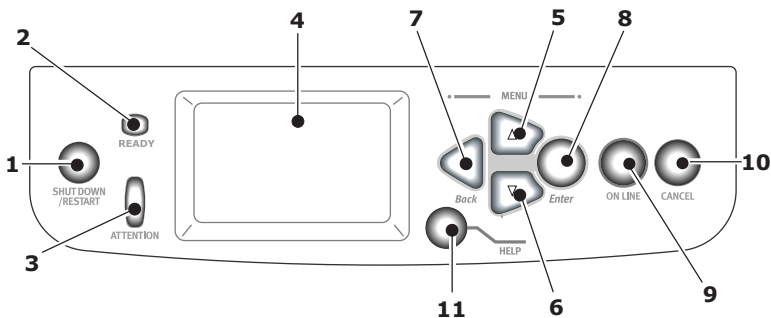
CONTROL PANEL

The control panel can be swivelled to 90° (maximum) upwards from its base position (1) as required for ease of use.



BUTTONS AND LIGHTS

The parts of the control panel are identified and briefly explained below:



1. Shutdown/Restart button

Hold down for more than 2 seconds for a soft shutdown. You can then press this button again for a restart or use the **Power** switch to turn off the printer completely.

2. Ready light

On: indicates ready to print

Flashing: indicates processing print data

Off: indicates unable to receive data (offline)

3. Attention light

Off: indicates normal operation

Flashing: indicates error(s) present but printing can continue

On: indicates error(s) present and printing cannot continue

4. Display panel

Displays status and setup information for the printer and user help information in your chosen language

5. Up-arrow button

Enters menu mode and enables upward movement through the displayed list of menu items

6. Down-arrow button

Enters menu mode and enables downward movement through the displayed list of menu items

7. Back button

Returns to the previous higher level menu item

8. Enter button

Enters menu mode and selects the menu item highlighted in the display panel

9. Online button

Switches between online (printer ready to receive data) and offline (printer not ready to receive data)

10. Cancel button

Cancels current print job

11. Help button

Provides additional textual or image data to supplement what is displayed on the display panel

DISPLAY PANEL MESSAGES

There are four types of display panel message:

- > Status information
- > Menu (functions) information
- > Configuration information
- > Help information

STATUS INFORMATION

Status information is associated with three printer states:

In the Information state, such as idling or printing, the printer is able to process print jobs.

In the Warning state, the printer has encountered some minor problem but is still able to process print jobs.

In the Error state, the printer has encountered a problem and cannot continue printing until the user has intervened and removed the cause of the trouble.

The top two lines of the display panel show the printer status. The bottom of the display panel normally shows a bar chart of the toner usage.

MENU (FUNCTIONS) INFORMATION

There are three types of menu (functions) information:

User menus: accessed by pressing the **Enter** button, **Up-arrow** or **Down-arrow** button on the control panel. These menus are available to the general user to make various settings that are used in the running of the printer.

Administrator menu: accessed by pressing the **Enter** button for more than 2 seconds while turning on the printer power supply (including Restart). Available to administrator level users. Restricts the changes that general users can make via the user menus.

System maintenance menu: accessed by pressing the **Up-arrow** and **Down-arrow** buttons together for more than 2 seconds while turning on the printer power supply (including

Restart). Available to support staff to allow printer configurations and special functions to be set.

CONFIGURATION INFORMATION

Configuration information displays printer configuration information such as internal firmware versions.

Menu options at each level can be scrolled through by moving the highlight with the **Up-arrow/Down-arrow** buttons and a highlighted option at that level can be selected by pressing the **Enter** button. When the lowest level menu has been selected, you can change the setting for that menu by selecting the required highlighted value from a list or by entering a numeric value. In other cases, you can display or print configuration information.

HELP MODE

When an error has occurred, press the **Help** button. Information displays that will help you correct the error.

DISPLAY PANEL MESSAGES

The display panel messages, supplemented by the Help messages where appropriate, are intended to be self-explanatory. More information on typical messages is provided in "[Appendix A – Display Panel Messages](#)" on page 131.

USING THE MENUS

NOTE

Menu details are given in "[Appendix B – Menu system](#)" on page 133 for reference.

The **Enter**, **Up-arrow**, **Down-arrow** and **Back** buttons are used to move through the printer menus. You can adjust settings (e.g. set the paper size for Tray 1) or view information (e.g. how much is left of a selected consumable).

Many of these menu settings can be, and often are, overridden by settings in the Windows printer drivers. However, several of the driver settings can be left at "Printer Setting," which will then default to the settings entered in these printer menus.

The steps involved in using the menus are typically as follows:

1. Ensure that the display panel indicates that the printer is ready to print.
2. Enter User menu mode by pressing either the **Enter** button or the **Up-arrow** or **Down-arrow** button and press the latter two repeatedly until the desired menu is highlighted in the displayed list.
3. Press the **Enter** button to select this menu.
4. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until the desired Item is highlighted.
5. Press the **Enter** button to select this Item.
6. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until the desired Value is highlighted.
7. Press the **Enter** button to select this Value. (If you are setting a parameter, ensure that an asterisk (*) appears beside the selected parameter Value.)
8. Press the **Online** button to exit menu mode and return to the ready to print status.

Refer to the section entitled ["Getting started" on page 37](#) and ["Appendix B – Menu system" on page 133](#) for examples of using the menus.

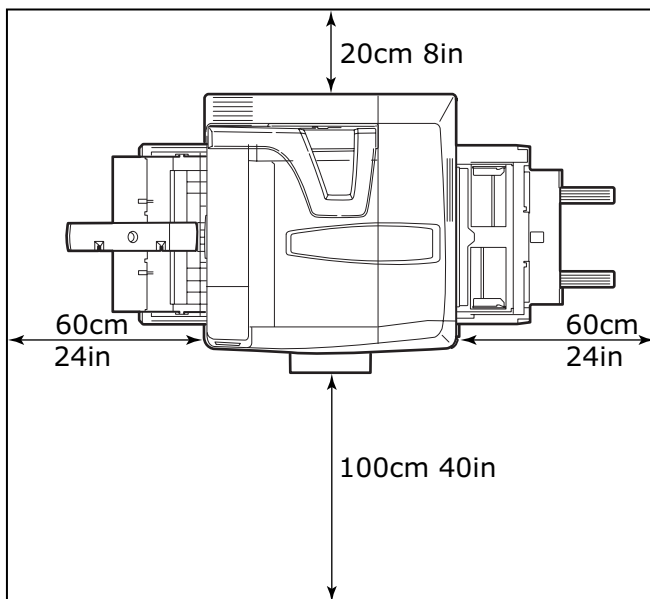
GETTING STARTED

This section provides information to help you get started with using your printer.

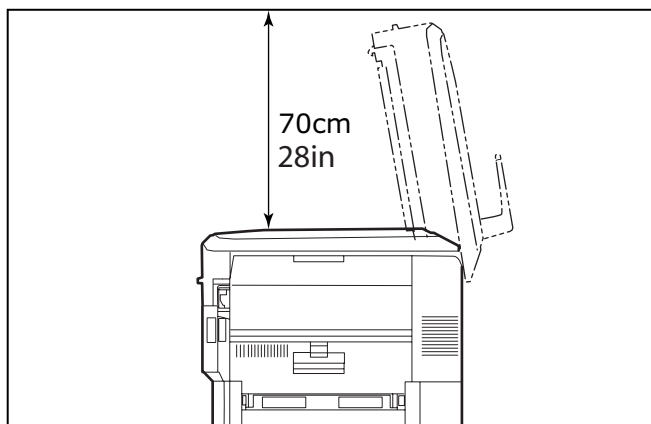
PRINTER LOCATION

Check that you have sufficient space for access:

- > around your printer:



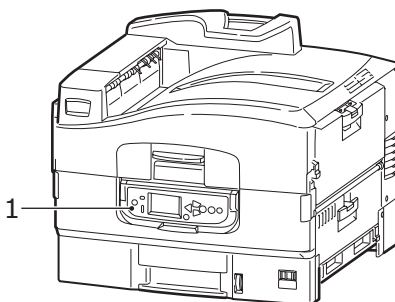
> above your printer:



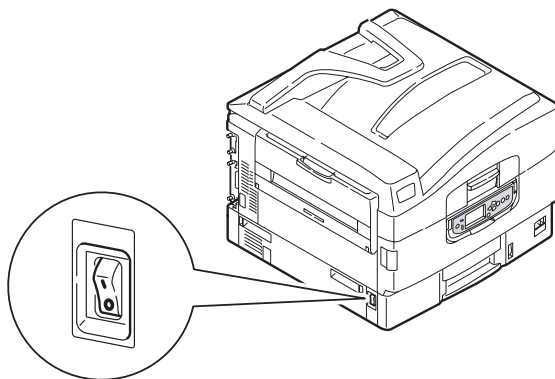
TURNING OFF/ON

TURNING OFF

1. Hold down the **Shutdown/Restart** button (1) on the control panel for more than 2 seconds to start the shutdown process.



2. When the display panel shows that you can either turn off or restart the printer, use the On/Off switch to turn off the printer. Please wait as this may take a short time.

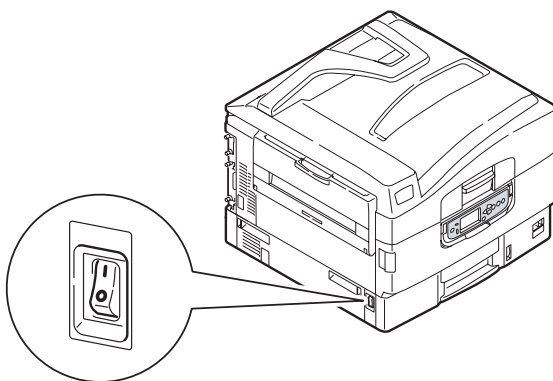


TURNING ON

NOTE

*If the display panel shows that you can either turn off or restart the printer, press **Shutdown/Restart** to turn on the printer.*

1. If the printer is turned off (no power), use the On/Off switch to turn on the printer. Please wait as this may take a short time.



CHECKING CURRENT SETTINGS

Carry out the following steps to generate a Configuration report (Menu Map) to confirm that your printer is correctly configured.

1. Ensure that there is Letter paper in Tray 1 (to be used in this operation).
2. Ensure that the display panel indicates that the printer is ready to print.
3. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Print Pages is highlighted.
4. Press the **Enter** button to select Print Pages.
5. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Configuration is highlighted.
6. Press the **Enter** button to select Configuration.
7. Press the Enter button to execute the command and a Configuration document is printed.
8. After printing the configuration document, the printer returns to the ready to print status.
9. You can use this document to check your printer configuration. System values and installed accessories are listed at the top of the first page while status values and settings follow.

INTERFACES AND CONNECTION

Your printer is equipped with a selection of data interfaces:

- > **USB** – For connection to a PC running Windows 98 or above (not Windows 95 upgraded to Windows 98) or Macintosh. This port requires a cable conforming to USB version 2.0 or above.

The printer may not work if a USB- compatible device is connected concurrently with other USB-compatible machines.

When connecting multiple printers of the same type, they appear as *****, ***** (2), ***** (3), etc. These numbers depend on the order of connecting or turning on each printer.

> **Ethernet** – For network cable connection.

NOTE

Interface cables are not supplied with your printer.

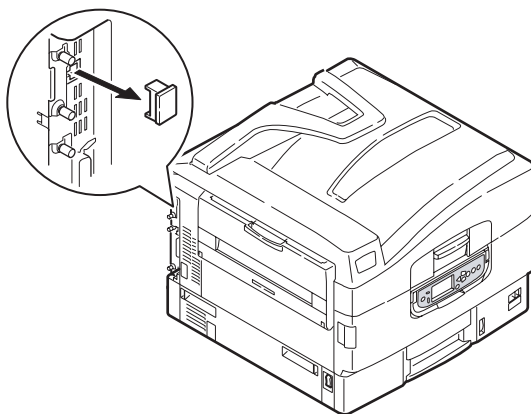
CONNECTING THE USB INTERFACE

Do not connect the USB cable at this time. You will be instructed when to connect the USB cable when you run the Drivers CD.

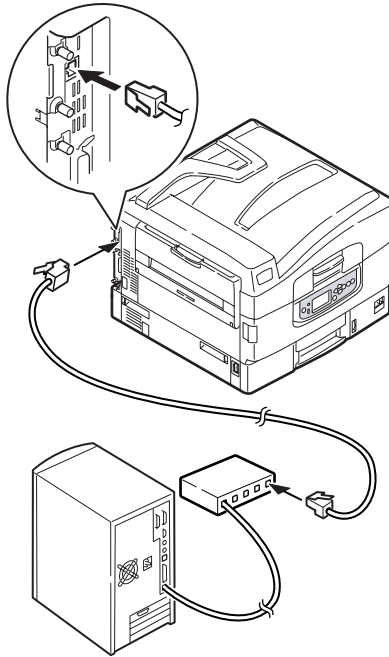
If you are connecting your printer directly to a stand alone computer proceed to the section entitled "Printer Drivers".

CONNECTING THE NETWORK INTERFACE

1. Turn off the printer and the computer.
2. Remove the protective cover from the network connector on the printer.



3. Connect an Ethernet cable between the printer and an Ethernet hub.



4. Turn on the printer and then the computer.

If your printer is to be installed as a network printer, please refer to the relevant section in the Setup Guide for further details on how to configure the network connection before installing the printer drivers.

NOTE

Administrator's authority is required when installing a network connection.

USING THE DRIVERS CD

For instructions on installing the drivers and other software, refer to the Setup Guide. This is a paper document that is packaged with the printer.

OPERATION

HOW TO ACCESS THE DRIVER SCREENS

Most of the features described are accessed via the printer driver windows. How you access them depends on your computer and its operating system.

The driver windows are tabbed dialogue boxes, offering a wide range of choices about how you want to print your documents.

There are two ways to access the driver features:

1. Directly from the Windows "Printers" folder ("Printers and Faxes" folder in Windows XP).

If you choose this method any changes you make will become the driver defaults. This means they will remain active for all your applications unless you specifically change them from within the application's Print dialogue.

2. From your application's Print dialogue.

If you choose this method any changes you make will usually only last for as long as the particular application is running, or until you change them again. In most cases, once you quit the application the driver defaults will return.

IMPORTANT!

Settings made from the printer's own control panel are the **printer defaults**. They determine how your printer will behave unless you specify otherwise from your computer.

The **driver defaults** override the printer defaults.

Application Print settings override both the printer defaults and the driver defaults.

CHANGING THE DRIVER DEFAULTS

WINDOWS XP/2000

1. Click [Start] → [Settings] → [Printers and Faxes] to open the Printers and Faxes window.

2. In the Printers and Faxes window, right-click on the appropriate printer driver icon, and choose [Printing Preferences] from the context menu.

WINDOWS VISTA

1. Click [Start] → [Control Panel]→ [Printers] to open the Printers window.
2. In the Printers window, right-click on the appropriate printer driver icon, and choose [Properties] from the context menu.

CHANGING THE APPLICATION'S DRIVER SETTINGS

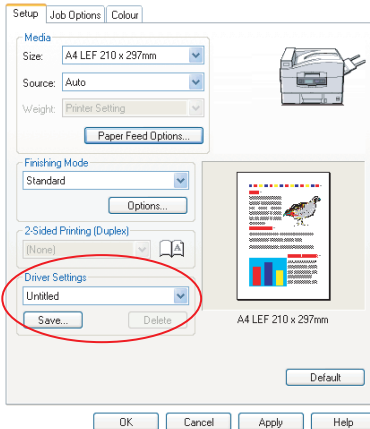
1. In your application, open the file you want to print.
2. On the [File] menu, choose [Print...].
3. In the application's Print dialogue, make sure the printer shown is the appropriate one, and click [Properties].

DRIVER SETTINGS

This feature allows you to save the printer driver settings and reuse them later. This could be useful if you frequently print many different types of document that require different printer driver settings. Recalling saved settings is a simple task that must be done first, before any job-specific changes are made. Rather than repeat the procedure throughout this manual, it is described here.

SAVING A SET OF DRIVER SETTINGS

1. Make any changes to the driver settings you want, as described in the relevant section of this manual.
2. In the driver's [Setup] tab, click [Save...].



3. Enter a meaningful name for the settings you are saving, and click [OK].

RECALLING SAVED DRIVER SETTINGS

1. In the driver's [Setup] tab, choose any previously saved [Driver Settings] you need.
2. Proceed to make any other adjustments for this job, as described in the relevant section in this manual.

SETTING THE DRIVER DEVICE OPTIONS

This section explains how to ensure that your printer driver can utilize all of the hardware features installed in your printer. Accessories such as hard disk, duplex unit (two sided printing), additional paper trays, etc., will only be usable if the printer driver on your computer knows they are there.

In some cases the hardware configuration of your printer is automatically detected when the driver is installed. However, it is advisable to at least check whether all of the available hardware features are listed in the driver.

This procedure is essential if you subsequently add extra hardware features to your printer after the drivers have been installed and set up.

To set the driver device options:

1. Access the driver's [Properties] window.
2. Select the [Device Options] tab.
3. Set the options for any devices you have installed, including the correct number of paper trays, finisher, duplex unit, etc.
4. Click [OK] to close the window and save your changes.

PRINTING BLACK

BLACK GENERATION

You can specify whether black graphics in color documents are printed using:

- > Composite Black

- > Pure Black

Pure Black is the default setting.

COMPOSITE BLACK

The cyan, magenta, yellow, and black toners are combined to create composite black. This will sometimes give a glossier finish due to the increased amount of toner. It can also appear as a slightly brownish black.

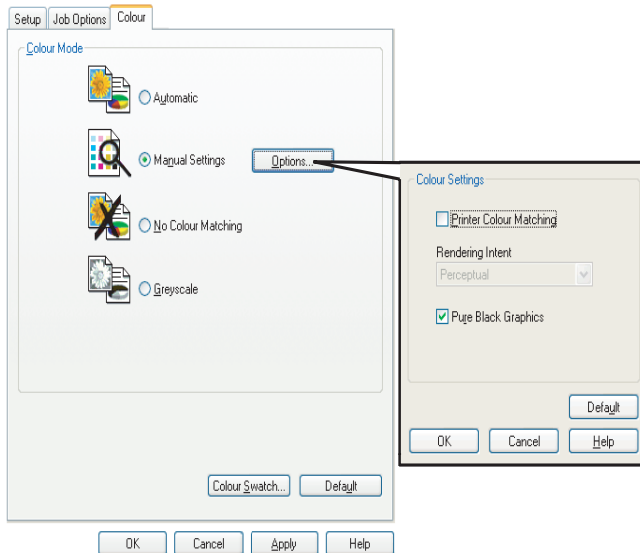
PURE BLACK

Only black toner is used to print pure black.

HOW TO CHOOSE COMPOSITE BLACK OR PURE BLACK

PCL

1. On the [color] tab select [Manual Settings] and click [Options...].
2. Select or deselect [Pure Black Graphics]. If Pure Black Graphics is not selected, prints will use composite black.



PCL 6

1. On the [color] tab select [Manual Settings] and click [Options...].
2. From the [Pure Black Graphics] drop-down list, select [On] or [Off]. If Pure Black Graphics is [Off], prints will use composite black.

COLOR MATCHING

FACTORS THAT AFFECT COLOR PRINTING

There are many factors that affect color printing. Some of the most important factors are:

- > the differences between the range of colors a monitor can reproduce versus the range of colors that a printer can reproduce (See [page 49](#)).
- > monitor settings (See [page 50](#)).
- > color settings in your software application (See [page 51](#)).
- > how your software application displays color (See [page 51](#)).
- > color settings in your printer driver (See [page 51](#)).
- > viewing (lighting) conditions (See [page 51](#)).
- > paper type (See [page 51](#)).

MONITOR COLORS VS. PRINTER COLORS

(Differences between the range of colors a monitor or printer can reproduce)

Neither a printer nor a monitor can reproduce the full range of colors seen by the human eye. Each device is limited to a certain range of colors.

- > A printer cannot reproduce all of the colors displayed on a monitor.
- > A monitor cannot reproduce all of the colors printed by a printer.

Both devices use very different technologies to represent color.

- > A monitor uses Red, Green and Blue (RGB) phosphors (or LCDs).
- > A printer uses Cyan, Yellow, Magenta and Black (CMYK) toner or ink.

Very vivid colors (such as intense reds and blues) can be displayed on a monitor. These same colors cannot be easily produced on any printer using toner or ink.

There are certain colors (for example, some yellows), that can be printed, but cannot be displayed accurately on a monitor.

These differences between monitor colors and printer colors are the main reasons why printed colors do not always match the colors displayed on screen.

MONITOR SETTINGS

The brightness and contrast controls on your monitor can change how your document looks on-screen.

Your monitor color temperature also influences how “warm” or “cool” the colors look.

Several of the color matching options make reference to your monitor’s color temperature.

Many monitors allow you to adjust the color temperature through their control panels.

There are several settings found on a typical monitor:

5000k or D50	Warmest, yellowish lighting	Typically used in graphics arts environments.
6500k or D65	Cooler	Approximates daylight conditions.
9300k	Cool	The default setting for many monitors and television sets.

k=degrees Kelvin, a measurement of temperature

SOFTWARE SETTINGS

Many software applications have their own color settings. The application settings may override the settings in the printer driver. Please refer to the documentation for your software application for details on that particular program's color management functions.

HOW THE APPLICATION DISPLAYS COLOR

Some graphics applications such as Adobe® Photoshop®, or Macromedia Freehand® may display color differently from "office" applications such as Microsoft® Word. Please see your application's online help or user manual for more information.

PRINTER DRIVER SETTINGS

The color settings in your printer driver can change the appearance of a document. The default driver settings produce good results for most documents.

There are several options available to help match the printed colors with those displayed on screen. (See ["How to perform color matching" on page 52.](#))

LIGHTING (VIEWING) CONDITIONS

A document can look very different under various lighting conditions.

For example, the colors may look different when viewed standing next to a sunlit window compared to how they look under standard office fluorescent lighting.

PAPER TYPE

The type of paper used can also significantly affect the printed color. For example, a printout on recycled paper can look duller than one on specially formulated glossy paper.

HOW TO PERFORM COLOR MATCHING

There are several ways to achieve color matching with your printer. The range of options available varies according to your computer platform, operating system, color production method, and printer driver type.

DESCRIPTIONS

The following table provides a brief description of the available settings for color matching:

SETTING	DESCRIPTION
Automatic	The printer driver will apply optimal settings based on the page content of your document.
Manual	PCL Allows you to select the rendering intent and pure black. See "Rendering intents" on page 53. See "Black generation" on page 47.
	PCL6 Allows you to select the rendering intent, pure black, and adjust the brightness and saturation levels. See "Rendering intents" on page 53. See "Black generation" on page 47. See "Brightness and saturation" on page 53.
Greyscale	This option prints all documents as monochrome using only black toner. No color prints. The printer interprets all colors as a variation of greys. Use Greyscale to speed up printing of proof copies or when you don't need to print a color document in color.
No color Matching	Use this option to turn off all printer color matching. No color correction occurs when selected.

HOW TO USE

You can change these settings on the [color] tab.

RENDERING INTENTS

When a document is printed, a conversion takes place from the document's color space to the printer color space. The rendering intents are essentially a set of rules that determine how this color conversion takes place.

SETTING	DESCRIPTION
Auto	Best choice for printing general documents. This setting is used by default.
Perceptual	Best choice for printing photographs. Compresses the source gamut into the printer's gamut while maintaining the overall appearance of an image. This may change the overall appearance of an image as all the colors are shifted together. This option attempts to simulate RGB color.
Saturation	Best choice for printing bright and saturated colors if you don't care how accurate the colors are. Best choice for graphs, charts, diagrams etc. Maps fully saturated colors in the source gamut to fully saturated colors in the printer's gamut.
Relative colorimetric	Good for proofing CMYK color images on a desktop printer. Much like Absolute colorimetric, except that it scales the source white to the (usually) paper white. Unlike Absolute colorimetric, Relative colorimetric attempts to take the paper white into account.
Absolute colorimetric	Best for printing solid colors and tints (such as Company logos). Matches colors common to both devices (monitor and printer) exactly. Clips the out-of-gamut colors to their nearest printed equivalent. Tries to print white as it appears on screen. The white of a monitor is often very different from paper white, so this may result in color casts, especially in the lighter areas of an image.

To change these settings in your printer driver:

1. Click the [color] tab.
2. Select [Manual Settings] and click [Options...].
3. Select [Printer color Matching] and choose the desired rendering intent from the drop-down list.

BRIGHTNESS AND SATURATION

Note

This feature is available with PCL 6 only.

Before printing a document, you can adjust the brightness and saturation settings:

SETTING	DESCRIPTION
Brightness	Determines the total amount of light (white) in the color. Zero brightness is black. 100% Brightness is white. Intermediate values are "light" or "dark" colors.
Saturation	The degree of saturation of a color is its relative purity, or intensity.

To adjust these settings:

1. Click the [color] tab.
2. Select [Manual Settings] and click [Options...].
3. Use the horizontal scroll bars to adjust the brightness and saturation levels.

MATCHING SPECIFIC COLORS

Use the color Swatch Utility to print out a chart of RGB swatches. Select your desired RGB values from the swatches and enter the values in your application's color picker. See the Utilities guide for more information.

PRINT RESOLUTION

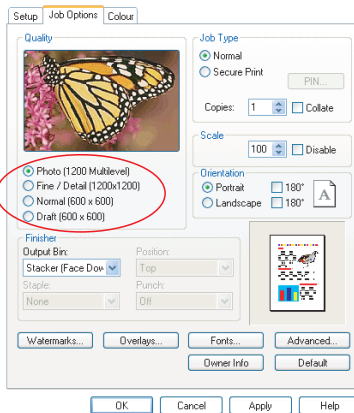
The resolution for a print job controls the print speed and print quality of a job.

Raising the print resolution can maximise the image quality of a print job. You usually do this for final versions of documents or when printing images (photographs).

Lowering the print resolution can increase print speed, reduce the need for toner, and reduce the wear on the image drum. You usually do this for proof or draft versions of documents.

HOW TO USE

1. On the [Job Options] tab select the desired [Quality] level.



The available options are:

- > Photo (1200 Multilevel) *best possible*
 - > Fine/Detail (1200 x 1200)
 - > Normal (600 x 600)
 - > Draft (600 x 600)
2. Click [OK].

FINISHING OPTIONS

Your printer has many features that help control the form of your printed document.

- > "Booklet printing" on page 57
- > "Collating" on page 59
- > "Separating queued print jobs" on page 61
- > "Cover print" on page 62
- > "Custom page size" on page 63
- > "Duplex (double-sided) printing" on page 65
- > "Printing multiple pages on one sheet (N-up)" on page 67
- > "Poster printing" on page 69
- > "Fit to page" on page 71
- > "Watermarks" on page 72

BOOKLET PRINTING

Booklet printing allows printing of multipage documents with their pages ordered and arranged so that final printed output can be folded into a booklet. Typically, letter (or tabloid) pages would be reduced to half-letter (or letter) and printed side by side on both sides of letter (or tabloid) paper, so that the paper can be folded into a booklet.

Since this feature prints on both sides of the page, it requires that a duplex unit to be installed in the printer (standard on C9850hdn model).

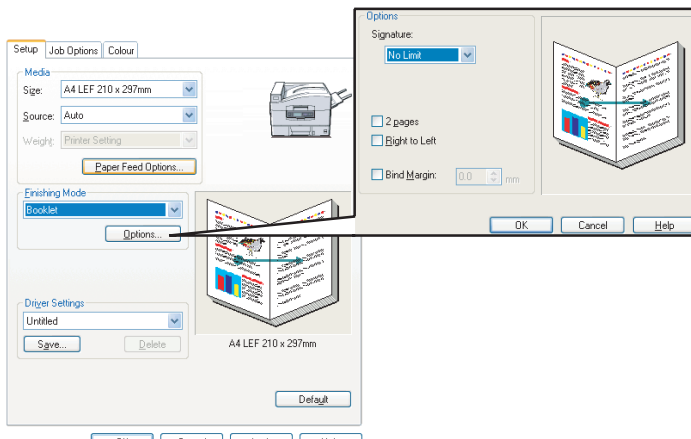
Notes

A few applications do not support booklet printing, but most do.

Note that the number of pages in a booklet is always a multiple of four, since two pages are printed on each side of each sheet of paper. If your document is not a multiple of four pages long, the last one, two or three pages in your folded booklet will be blank.

ACTIVATING BOOKLET PRINTING

1. On the driver's [Setup] tab, choose [Booklet] from the [Finishing Mode] drop-down list.
2. Click [Options...].



- 3.** In the Booklet window you can set the [signature] size, the number of [pages] per side of paper, the [binding margin], and if the booklet will be read [Right to Left] or Left to Right. The graphic in this window shows the effect of each choice you make.

Click [Help] for more information

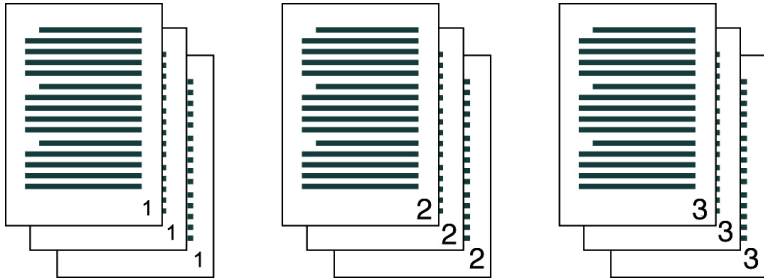
- 4.** Click [OK].

If you do not have the [Booklet] option on the [Setup] tab, check that Duplex is enabled in the driver. (See "Setting the driver device options" on page 46.)

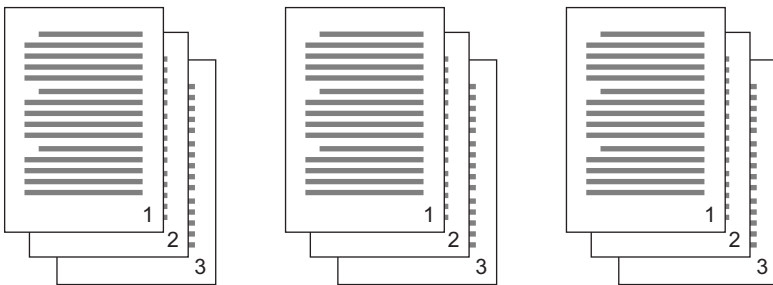
COLLATING

This feature allows multiple copies of a multipage document to be printed with the pages of each copy in sequence.

Uncollated pages print like this:



Collated pages print like this:



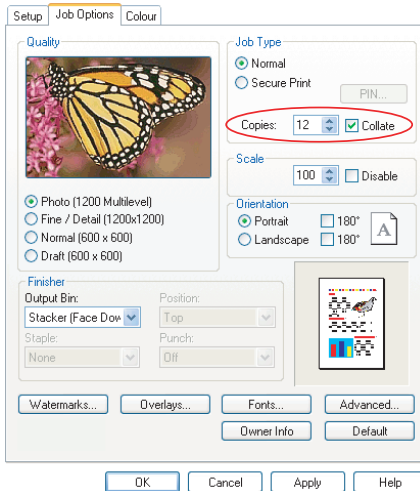
Application collate—Some application programs have a collate feature in their print options. In this case the application performs the document collation and may send the job multiple times to the printer. Generally, this method is slower but can be more reliable.

Printer collate—This section describes the collate function built into the printer driver. In this case the job is stored temporarily in printer memory or on the printer's hard disk (if installed), and the printer performs collation. This method is normally faster, but may not work from all applications.

If you experience problems using printer collate, use the collate option in your application's print options instead.

PRINTING COLLATED DOCUMENTS

1. On the [Job Options] tab, choose how many [Copies] you want to print from the scrolling list.
2. Click the [Collate] checkbox (a checkmark appears).

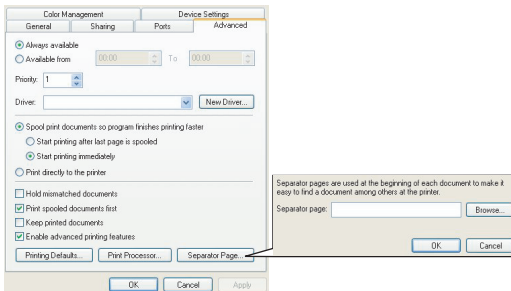


3. Click [OK].

SEPARATING QUEUED PRINT JOBS

When you share a printer with other users it can be useful to print a special page between print jobs to help locate each user's job in a paper stack at the printer.

The separator page is set from the printer driver's default properties window. Access to this is directly from Windows, not from within your application program. See "Changing the driver defaults" on page 43.



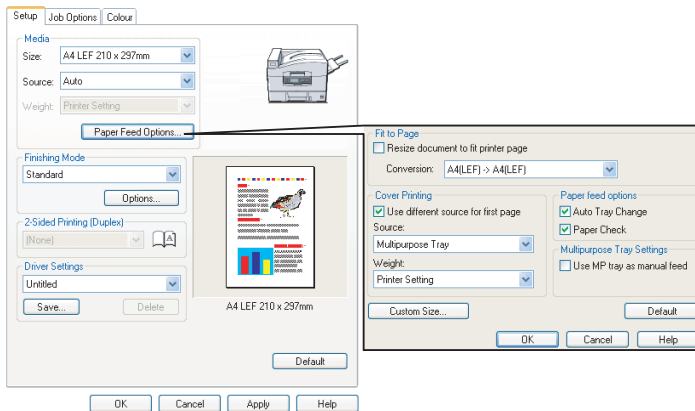
1. In the driver's Advanced tab click the [Separator Page...] button.
2. Click [Browse...] and navigate to a file containing an image of the separator page you wish to use, then click [OK].

COVER PRINT

Cover print is when the first page (cover) of a print job is fed from one paper tray, and the remaining pages of the print job are fed from another paper tray.

HOW TO USE COVER PRINT

1. On the [Setup] tab, click [Paper Feed Options...].
2. Under [Cover Printing], select [Use different source for first page].



3. Choose the tray you want to feed the cover page from and the paper type in the [Source] and [Weight] drop-down lists.
4. Click [OK] to close the Paper feed options window.

CUSTOM PAGE SIZE

This feature enables printing on non-standard sized print media. The multipurpose tray is used for feeding non-standard media sizes. Print media width can be from approximately 51mm to 328mm, and its length can be from 128mm to 1200mm. Actual limits vary slightly depending on which printer driver you use and your computer's operating system.

Some software applications may not produce the desired results with non-standard print media sizes, and some experimentation may be required to obtain the results you want.

Notes

If you are using heavy media, transparencies, envelopes or labels, use the face up (straight through) paper feed path.

For face up printing (straight-through path), make sure the rear exit is *open* and the paper support is extended.

- > Paper is stacked in reverse order.
- > Tray capacity is about 100 sheets. (Actual capacity depends on paper weight.)

HOW TO CREATE, EDIT, AND DELETE A CUSTOM PAGE SIZE

1. On the driver's [Setup] tab, click the [Paper Feed Options...] button.
2. In the Paper Feed Options window, click [Custom Size...].
If you have previously saved any custom sizes they will be listed in the Custom Size window.
3. **To create a new custom size:**
 - a. Enter the desired dimensions in the Width and Length boxes.
 - b. Enter a name for the new size in the Name box, and click [Add>>] to save it in the list.

To edit a previously saved custom size:

- a. Click its name in the list and edit its dimensions and/or name.
- b. Click [Modify].

To delete a previously saved custom size:

- a. Click its name in the list.
 - b. Click [Delete].
4. Click [OK] to accept your changes and close the Custom Size window.

SELECTING A CUSTOM PAGE SIZE

Once you have created a custom page size using the previous procedure:

1. On the driver's [Setup] tab open the [Size] drop-down list.
2. Select your defined custom page.

If this is the size of your document but you want to scale it to fit a standard size of paper:

1. On the driver's [Setup] tab, click [Paper Feed Options...].
2. Click [Resize document to fit printer page] and choose the printer's actual paper size from the [Conversion] drop-down list.

It is also possible to select the page size within your software application. See the documentation supplied with your software application for more information.

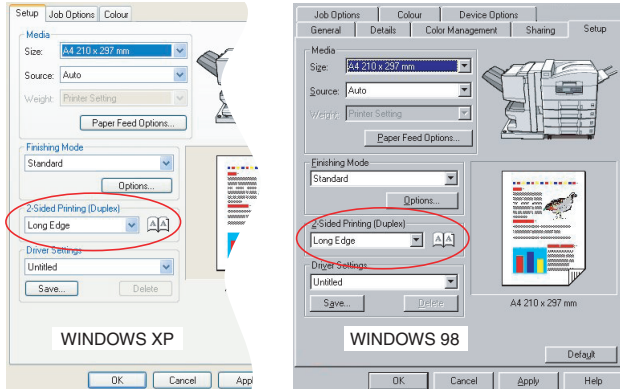
DUPLEX (DOUBLE-SIDED) PRINTING

If your printer has a duplex unit installed you can print on both sides of the paper, to save paper, weight, bulk and cost.

- > Only paper can be used for duplex printing, not transparencies or other media.
- > Use paper stock of 75–120 g/m². If you experience excessive curling with 75–90 g/m² paper, use 105 g/m².
- > Use standard sized paper stock only, e.g. A4, A3, Letter, etc.
- > Load the paper print side up. Ream wrappers are usually marked with an arrow, indicating which is the print side.
- > Paper can be fed from standard paper trays, including the high capacity feeder if you have one, but not from the multipurpose tray.
- > Do not set the paper weight to Ultra Heavy.
- > Do not enable the White Page Skip function.

ACTIVATING DUPLEX PRINTING

1. On the driver's [Setup] tab, under [2-Sided Printing], select the binding edge you want.



For portrait (tall) page layout the usual choice is [Long Edge].
For landscape (wide) page layout the usual choice is [Short Edge].

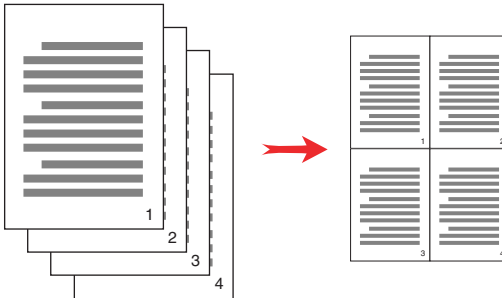
Choosing [None] turns off duplex printing and your document will be printed single-sided.

If you have a duplex unit installed, but do not have the [2-sided printing] option on the [Setup] tab, check that the Duplex option is enabled in the driver. (See "Setting the driver device options" on page 46.)

PRINTING MULTIPLE PAGES ON ONE SHEET (N-UP)

This feature scales the page size of your document for printing and reproduces several pages per sheet.

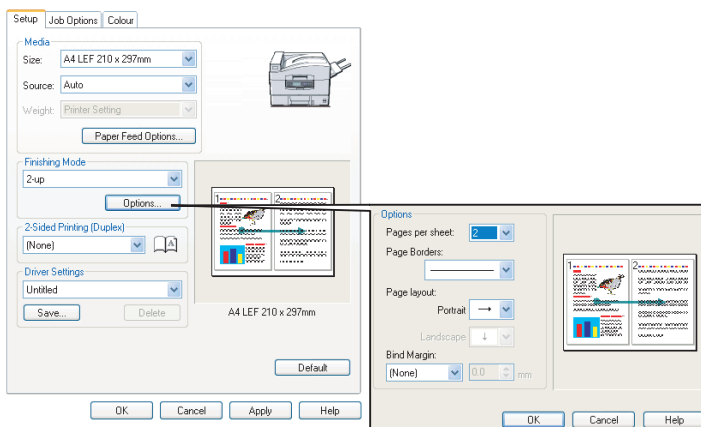
This is useful when you simply want to proof your page layout, or distribute your document in a more compact format. It saves paper, bulk, weight and cost.



If you have a duplex unit installed, you can even combine this feature with duplex printing to save even more.

HOW TO PRINT MULTIPLE PAGES ON ONE SHEET

1. In the driver's [Setup] tab, choose the number of pages you want to print on each sheet from the [Finishing Mode] drop-down list. [Standard] is normal, and [8-up] (PCL-6) and [16-up] (PCL) is maximum.
2. Click [Options...] to choose from the available options for this feature.



From here you can choose the page printing order, the page layout, whether you want printed page borders, and a binding margin if you need it.

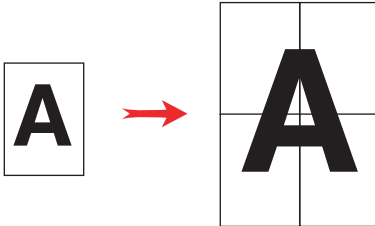
3. Click [OK].

POSTER PRINTING

Note

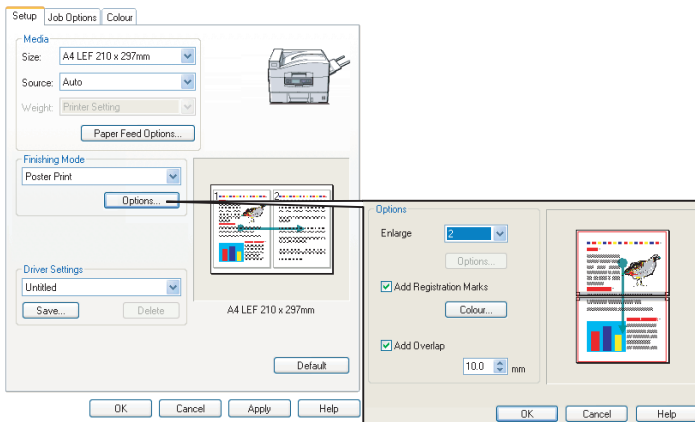
Poster printing is not available with the PCL 6 driver.

This option allows you to print posters by dividing a single document page into multiple pieces (sometimes called “tiles”). Each piece prints, enlarged, on a separate sheet. Then, you combine the separate sheets to create a poster.



PRINTING POSTERS

1. In the driver's [Setup] tab, under [Finishing Mode] choose [Poster Print].
2. Click [Options...] to open the Poster Print window.



- a. Choose the [enlargement] required for your document to fill the poster.

- b. [Registration marks] can be printed if required so that your printed pages (tiles) can be trimmed exactly to the edge of the image.
 - c. An [overlap] may help you to match adjacent tiles when making up your final poster.
- 3.** Click [OK] to close the Paper Feed Options window.

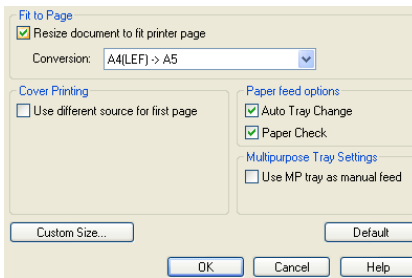
FIT TO PAGE

Fit to Page allows you to print data formatted for one size page onto a different size page, without modifying the print data.

HOW TO USE

1. On the [Setup] tab, click [Paper Feed Options...].
2. Click [Resize document to fit printer page].

A checkmark appears in the box.



3. Choose the scaling factor you need from the [Conversion] drop-down list.
4. Click [OK] to close the Options window.

WATERMARKS

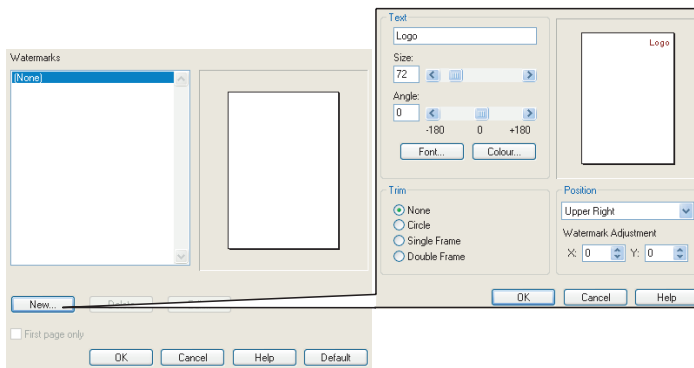
Note

This feature is not available with the PCL 6 driver.

A watermark is typically faint text that is superimposed on a printed document. This can be used to indicate that the document is “Draft”, or perhaps “Confidential”.

HOW TO CREATE A NEW WATERMARK

1. On the [Job Options] tab click [Watermarks...].
2. Click [New...] and enter the text for your watermark.



3. Adjust your watermark's size, angle, font, color, position and border (trim) if required.
4. Click [OK] to accept your changes. The new watermark is now in the Watermark list.

HOW TO CHOOSE A PREVIOUSLY CREATED WATERMARK

1. On the [Job Options] tab click [Watermarks...].
2. On the Watermarks window, select the watermark in the list. A preview of the watermark is shown.
3. Select the [First page only] checkbox if required.

4. Click [OK].

HOW TO EDIT AN EXISTING WATERMARK

1. On the [Job Options] tab click [Watermarks...].
2. Select the watermark you want to edit, then click [Edit...].
3. Modify the text for your watermark.
4. Modify the attributes (font, color, size, angle) for your watermark and click [OK] to accept your changes.

SECURE PRINTING

Secure printing allows you to print confidential documents on printers that are shared with other users in a network environment. The document does not print until a PIN (**P**ersonal **I**dentification **N**umber) is entered through the Printer Control Panel. You must go to the printer and enter the PIN.

This feature requires the hard disk drive in your printer, this device must be enabled in the printer driver. (See “Setting the driver device options” on page 46.)

If there is not enough hard disk space for the spooled data, a “Disk Full” message displays, and only one copy prints.

The secure printing feature may not be available from within some PC applications.

If your application software has a collate print option, turn it off. Otherwise secure printing will not work.

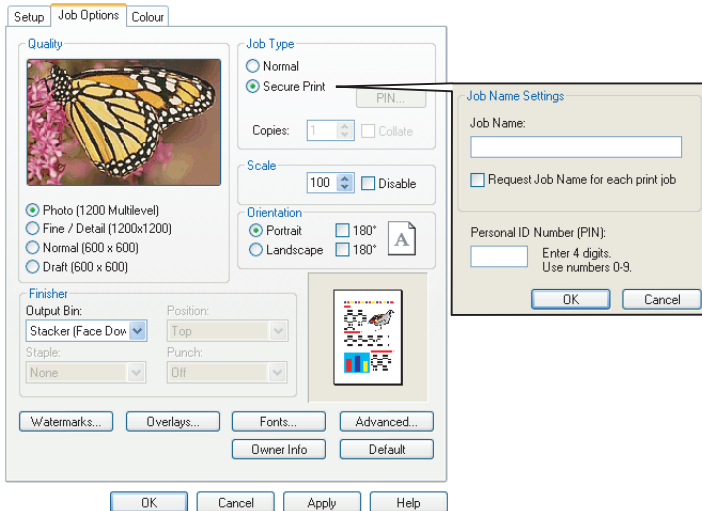
There are three parts in secure printing:

1. “Sending the document” on page 75
2. “Printing the document” on page 77
3. “Deleting a secure print document” on page 78

SENDING THE DOCUMENT

1. In the driver's [Job Options] tab, click [Secure Print].

The Job PIN (**P**ersonal **I**dentification **N**umber) window opens.



If the PIN window does not open, click the [PIN] button.

2. In the Job PIN window, enter a [Job Name] for this print job.

The name may be up to 16 alpha-numeric characters. If you have more than one print job stored on the printer when you come to print, you will need a distinctive name to distinguish between each of your print jobs.

3. If you would like a prompt at the printer for the job name, click the [Request Job Name for each print job] checkbox below the name entry.

4. Enter a number from 0000 to 9999 in the [PIN] box.

Your PIN must be unique on this printer. Each user should be allocated a PIN by the system administrator.

5. Click [OK] to accept your changes.

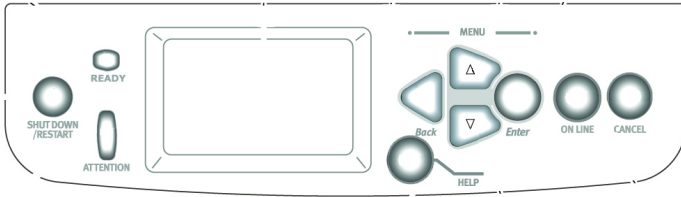
6. Click [OK] to close the Printer Properties window.

7. Print your document.

The print job will be sent to the printer, but will not print at this time.

PRINTING THE DOCUMENT

Your secure print job is printed using the Printer Control Panel on the front of the printer.



1. When the printer is idle (Ready to Print indicated in the display), press [ENTER] to enter the menu mode.
2. Use the <Click>▲<Click>▼ buttons to select the PRINT SECURE JOB menu, then press [ENTER].
3. Use the <Click>▲<Click>▼ buttons to enter the first digit of your PIN, then press [ENTER].
4. Repeat step 3 to enter the remaining three digits.
If you have more than one stored document, a list appears in the display.
5. Use the <Click>▲<Click>▼ buttons to select the name of the print job you wish to print, and press [ENTER] to select it.
6. If necessary, use the <Click>▲<Click>▼ buttons to highlight the PRINT option.
7. Press [ENTER] to confirm you wish to print the document.
8. Use the <Click>▲<Click>▼ buttons to select the number of collated copies you require.
9. Press [ENTER] to print your document.

When all required copies have been printed your document is automatically deleted from the printer's hard disk.
It is also possible to print and delete secure documents remotely from your PC using the Storage Device Manager utility.

DELETING A SECURE PRINT DOCUMENT

If you change your mind about printing a secure document, you can delete it from the printer's hard disk without printing it first.

1. Follow steps 1 to 5 in the previous procedure for printing the document.
2. Use the <Click>▲<Click>▼ buttons to highlight the DELETE option and press [ENTER].
3. If necessary, use the <Click>▲<Click>▼ buttons to highlight the YES choice, and press [ENTER] to confirm the deletion.
Your document is deleted from the printer's hard disk without printing.

FONT SUBSTITUTION

This advanced feature allows you to substitute printer fonts for TrueType fonts. This may be useful if you have a document formatted with a font that is not installed on your system, but the font is built in to the printer.

When using Font Substitution, the general layout of a document does not change, but accurate font design is lost. For this reason, Font Substitution is generally not recommended as it becomes very difficult to predict the appearance of your document when printed, since there is no way of previewing how the document will print with these substituted fonts.

Notes

1. If your software application uses a proprietary printer driver, Font Substitution may not work.
2. Not all TrueType fonts can be replaced with printer fonts.

Tip: You can print a sample of each of the printer's built-in fonts from the Printer Operator Panel.

HOW TO USE

1. On the [Job Options] tab, click [Fonts...].
2. Choose either [Download as Outline Font] or [Download as Bitmap Font].
3. Check the [Font Substitution] checkbox to activate font substitution, or clear it to deactivate this function.

The TrueType and Printer Font panes list the fonts on your system and which fonts will be substituted for them on the printer. If you click on one of the TrueType fonts in the list, its associated printer font will be highlighted. You can change this if you wish by clicking on a different printer font. Click [Default] to restore the default settings.

4. Click [OK] to confirm your changes.

CONSUMABLES AND MAINTENANCE

This section explains how to replace consumable and maintenance items when due. As a guide, the life expectancy of these items is:

- > Toner; Black — 18,500 Letter pages at 5% coverage.
- > Toner; Cyan, Magenta, Yellow — 16,500 Letter pages at 5% coverage.

The printer is shipped with sufficient toner for 7,500 Letter pages in the print cartridges of which 1 – 2,000 Letter pages of toner are used to charge the image drum.

- > Image drum — 42,000 Letter pages average life
- > Transfer belt — Approximately 100,000 Letter pages
- > Fuser — Approximately 100,000 Letter pages

CHECKING CONSUMABLE/MAINTENANCE ITEM USAGE

At any time, you can check how much of each consumable/maintenance item is left by using the appropriate menus. For example, enter the menu system and follow the path:

Configuration>Supplies Life>Cyan Toner

The percentage of Cyan Toner remaining is displayed on the display panel and the printer then returns to the ready to print status.

REPLACEMENT INDICATIONS

The display panel provides messages to the effect that consumables/maintenance items are running low or nearing end of life followed some time later by a message that replacement is required. You should replace the item as soon as possible after this message is displayed to avoid the possibility of print quality being compromised.

The paper feed rollers and the multi-purpose (MP) tray feed rollers do not have any replacement warning messages. Recommended replacement: after approximately 120,000 Letter sheets.

CONSUMABLE ITEM ORDER INFORMATION

ITEM	LIFE	ORDER NUMBER
Toner, Black	18,500 Letter pages @ 5%	43837112
Toner, Cyan	16,500 Letter pages @ 5%	43837111
Toner, Magenta	16,500 Letter pages @ 5%	43837110
Toner, Yellow	16,500 Letter pages @ 5%	43837109
Image drum, Black	42,000 Letter pages avg	42918104
Image drum, Cyan	42,000 Letter pages avg	42918103
Image drum, Magenta	42,000 Letter pages avg	42918102
Image drum, Yellow	42,000 Letter pages avg	42918101
Staples	3 x 3000 staples	42937601

MAINTENANCE ITEM ORDER DETAILS

ITEM	LIFE	ORDER NUMBER
Fuser unit	100,000 Letter pages	120V: 42931701 230V: 42931702
Belt unit	100,000 Letter pages	42931601
Waste toner bottle	30,000 Letter pages avg	42869401

REPLACING CONSUMABLES/MAINTENANCE ITEMS

Each consumable or maintenance item comes complete with its own installation details which give full instructions on replacement. You are advised to follow these instructions carefully.

CAUTION!

Only use genuine Oki Original consumables to ensure the best quality and performance from your hardware. Non-Oki Original products may damage your printer's performance and invalidate your warranty. Specifications subject to change without notice. All trademarks acknowledged.

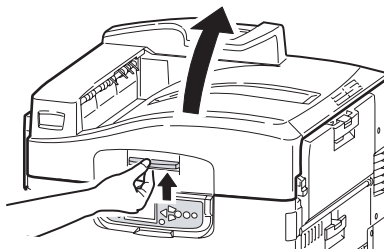
CLEANING THE LED HEADS

You are advised to clean the LED heads:

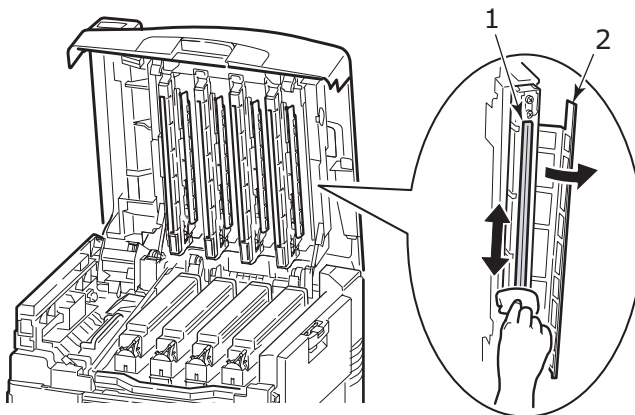
- > any time you replace a toner cartridge (a LED lens cleaner is enclosed with each replacement toner cartridge)
- > if printing is showing signs of faded images, white stripes or blurred letters

You can use a LED lens cleaner or dry, soft cloth for cleaning the LED heads.

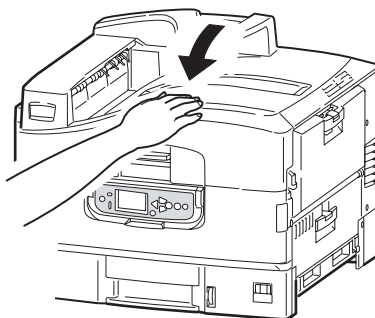
1. Open the top cover.



- 2.** With an LED lens cleaner or soft cloth, gently wipe each of the four heads (1). Move the cleaner as shown, using a clean section of the cleaner with each pass. Be careful not to damage the guards (2).



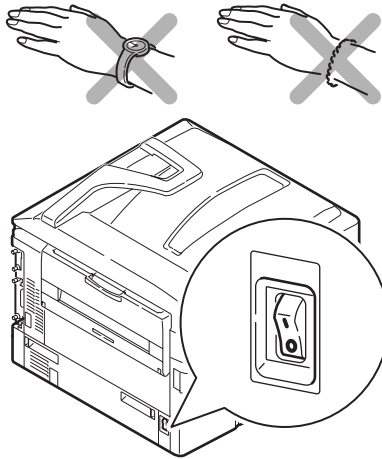
- 3.** Close the top cover.



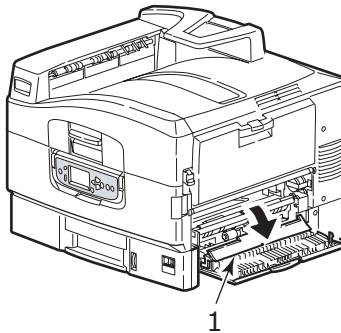
CLEANING THE PAPER FEED ROLLERS

Clean the paper feed rollers if paper jams frequently occur.

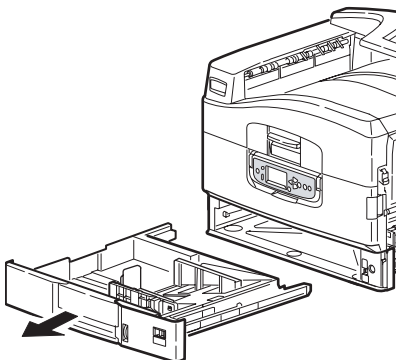
1. Remove items like a wrist watch or bracelet then use the **Shutdown/Restart** button followed by the **On/Off** switch to turn the printer off.



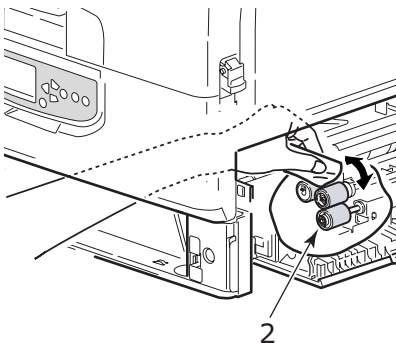
2. Open Tray 1 side cover and pull out the paper guide plate (1).



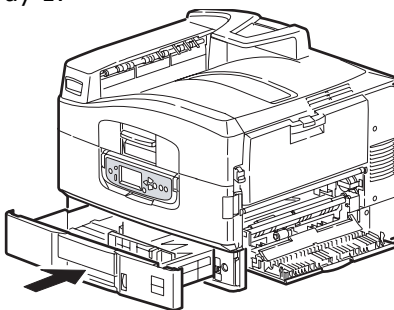
3. Remove Tray 1 completely from the printer.



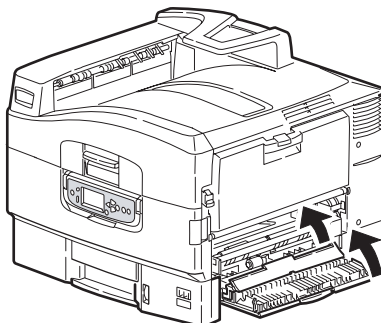
4. Gaining access through the gap left by Tray 1, wipe the 3 paper feed rollers (2) with a soft cloth lightly moistened with water.



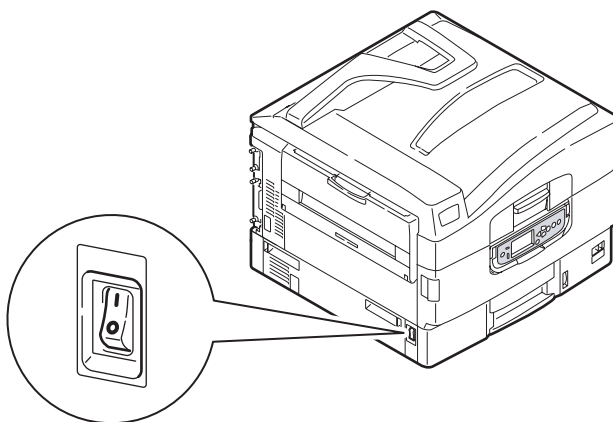
5. Replace Tray 1.



- 6.** Return the paper guide plate to its original position and close Tray 1 side cover.

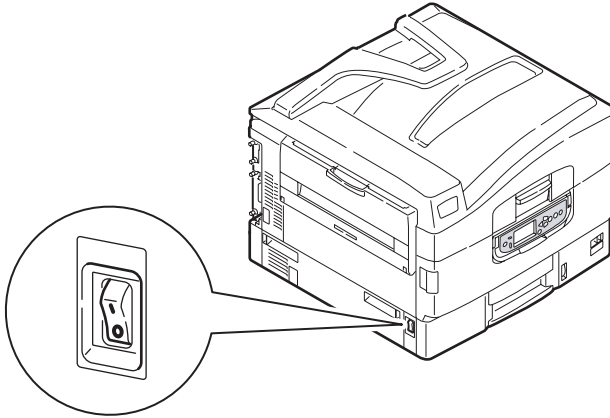


- 7.** Turn on the printer.

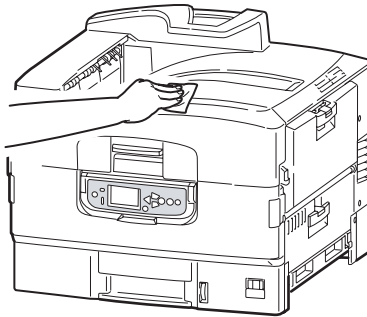


CLEANING THE PRINTER CASING

1. Turn the printer off by using the **Shutdown/Restart** button followed by the **On/Off** switch.

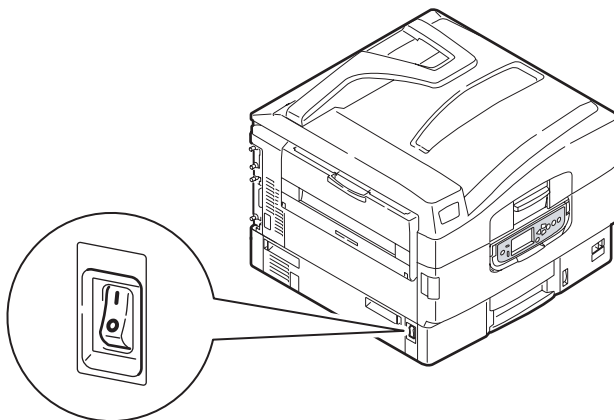


2. Wipe the printer surface with a soft cloth moistened sparingly with water or neutral detergent.



3. Use a soft dry cloth to dry the printer surface.

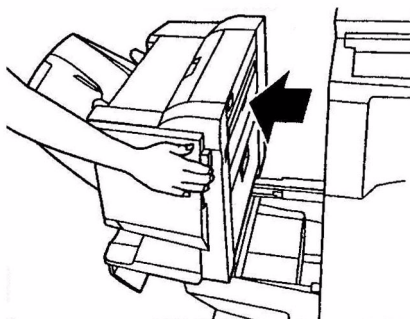
4. Turn on the printer.



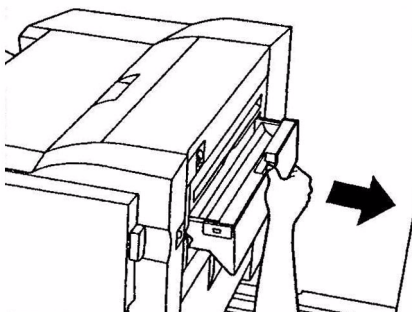
EMPTYING THE PUNCH CHIP BOX (PUNCH UNIT OPTIONAL ACCESSORY)

When the display panel indicates that the punch chip box is full, empty the box as follows:

1. Operate the Finisher lever and move the Finisher away from the printer.



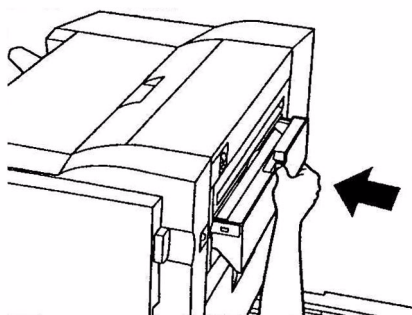
2. Pull out the punch chip box, being careful to keep it level so as not to spill any chips.



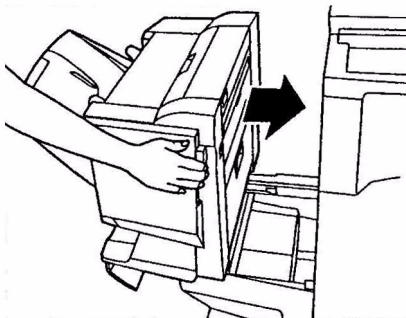
3. Discard the chips in an appropriate place.



4. Replace the punch chip box carefully into the Finisher.



5. Check that the punch chip box has been replaced correctly then move the Finisher back into position, being careful not to trap your fingers.



OPTIONAL ACCESSORIES

This section describes optional accessory equipment for your printer. The following accessories are available:

- > second, third paper tray (to increase paper input capacity)
- > high capacity feeder (equivalent to three paper trays)

NOTE

Tray configurations are: Tray 1 only, Tray 1 + 2nd Tray, Tray 1 + 2nd Tray + 3rd Tray, Tray 1 + HCF, Tray1 + 2nd Tray + HCF

- > Finisher (for stapling or saddle stitching printer output)
- > Punch unit (to extend Finisher functionality)

ACCESSORY ORDER INFORMATION

ITEM	ORDER NUMBER
Second, third paper tray	42831301
High capacity feeder (HCF)	42831501
Finisher: 4-tray 5-tray	70050701 70050801
Finisher Punch Unit: 2-3 hole	42872902

INSTALLING ACCESSORIES

Each accessory comes complete with its own documentation which gives full instructions on installation. You are advised to follow these instructions carefully.

After installation, print out a Menu Map (Configuration document) to check that the installation has been successful.

NOTE

The Finisher and Punch unit must be installed by an authorized engineer.

For the following accessories, you have to make the appropriate setting in your printer driver(s):

- > paper tray(s)
- > Finisher

TROUBLESHOOTING

This section provides information to help you deal with problems that may arise when using the printer. The following paragraphs describe actions to take in the event of a paper jam and how to deal with unsatisfactory print results. Display panel messages about paper jams and relevant actions are given in this section while a list of other typical messages and suggested responses is given in ["Appendix A – Display Panel Messages" on page 131.](#)

PAPER JAMS – PRINTER

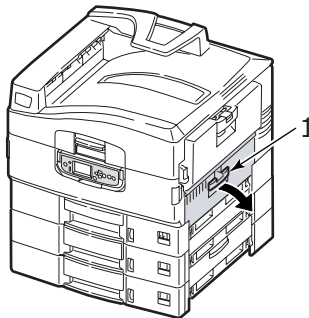
If a paper jam occurs, a message appears on the display panel in the printer Control Panel. You can press the Help button to display guidance on how to clear the jam.

For full details of clearing jams, refer to the following paragraphs, which correspond to the paper jam messages.

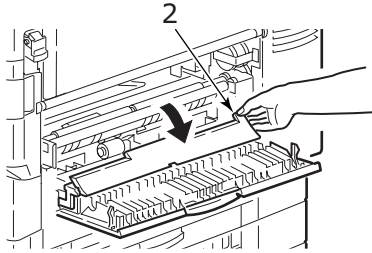
OPEN COVER, PAPER JAM, TTTTTT SIDE COVER

Tray 1, or any one of Tray 2 to Tray 5 (if installed), can appear in place of the tttttt characters in the display panel message. In this example Tray 1 is used, the procedure being similar for all other trays.

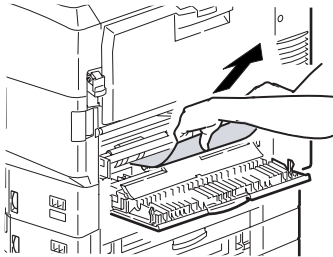
1. Squeeze the catch (1) on Tray 1 side cover and open the cover.



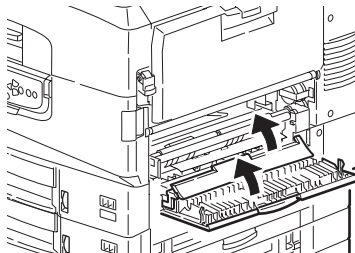
2. Holding it by the tab (2), turn the paper guide outward.



3. Carefully remove the jammed paper.

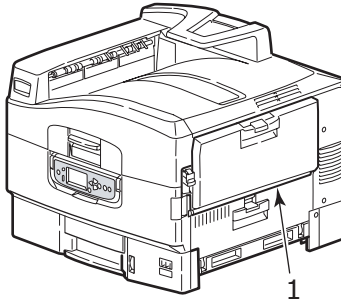


4. Put the paper guide back into position and close Tray 1 side cover.

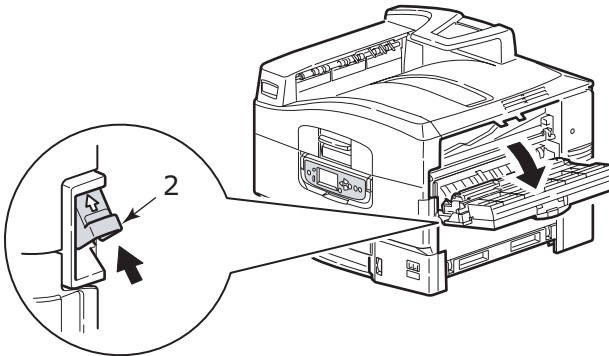


OPEN COVER, PAPER JAM, SIDE COVER

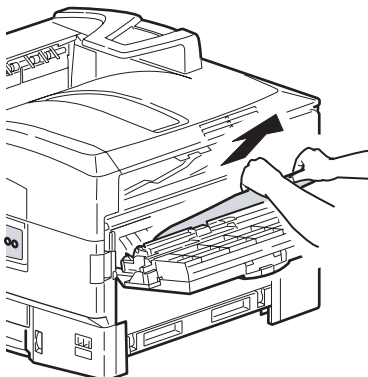
1. If the MP Tray is open, close it so that the side cover (1) is visible.



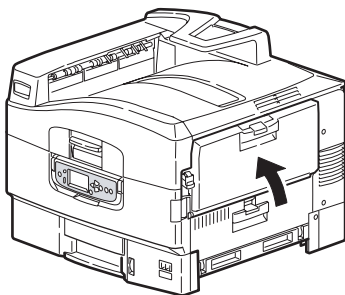
2. Pull the release lever (2) and pull open the side cover.



3. Carefully remove the jammed paper.

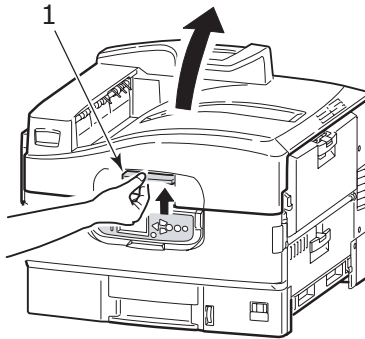


4. Close the side cover.



OPEN COVER, PAPER JAM, TOP COVER

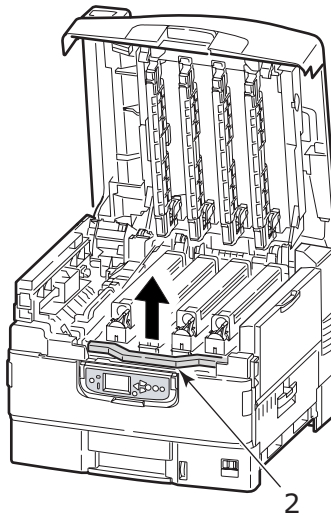
1. Squeeze the top cover handle (1) and open the top cover.



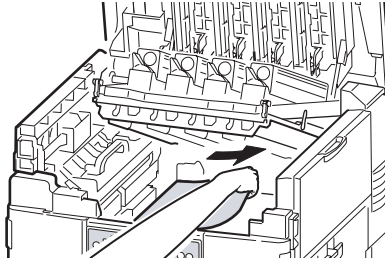
WARNING!

Be careful not to touch the fuser unit which is hot after printing.

2. Squeeze the basket handle (2) and raise the drum basket.



3. Carefully remove any paper on the belt.

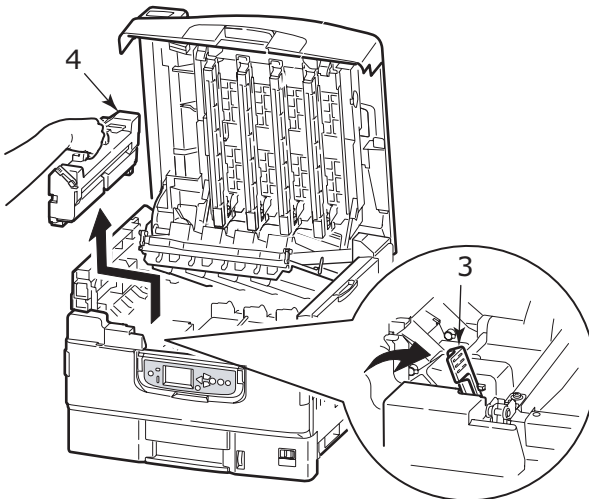


4. If paper is jammed in the fuser unit, push the lock lever (3) in the direction shown to release the unit.

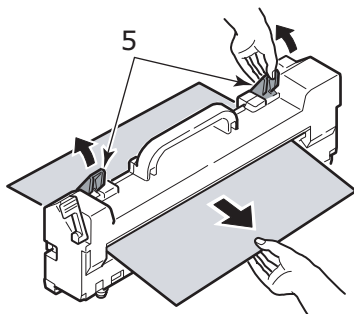
WARNING!

Be careful not to touch the fuser unit which may be hot after printing. If the fuser unit is hot, wait until it cools before attempting to remove any jammed paper.

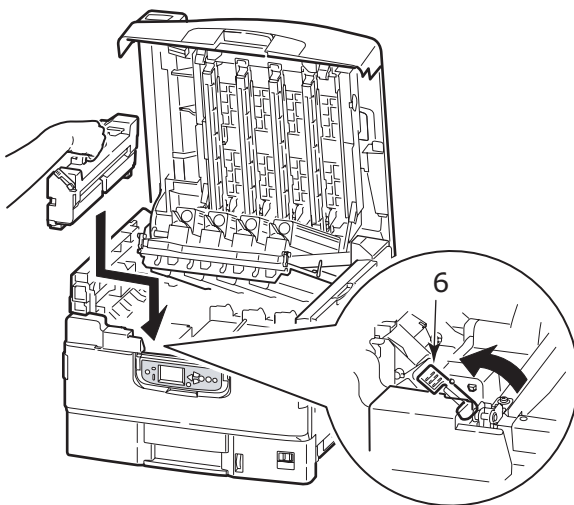
Holding the fuser unit (4) by the handle, lift it out of the printer and place it on a flat surface.



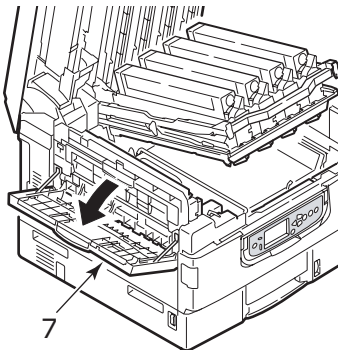
- 5.** Pull up the jam release levers (5) and remove the jammed paper.



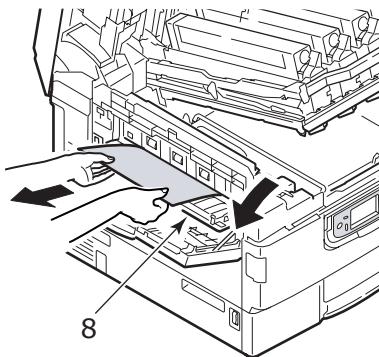
- 6.** Carefully replace the fuser unit into the printer and turn the lock lever (6) in the direction shown to lock the fuser unit.



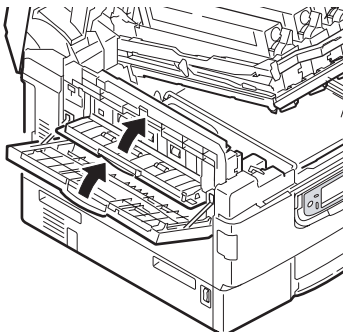
- 7.** If paper is jammed near the paper exit, open the face-up stacker (7).



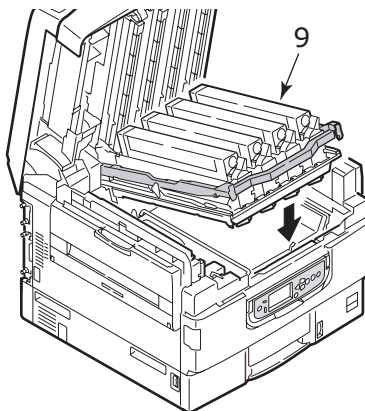
- 8.** Open the side cover (paper exit) (8) and remove the jammed paper.



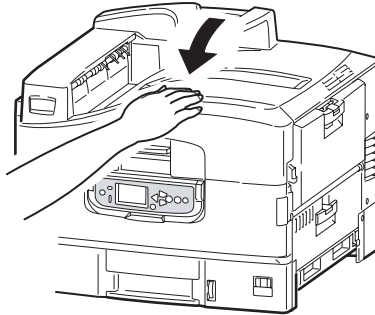
- 9.** Close the side cover (paper exit) and then the face-up stacker.



- 10.** Return the image drum basket (9) into position and check it is locked.



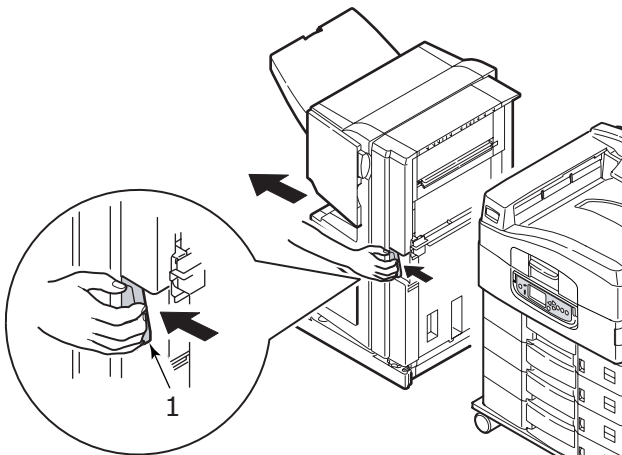
11. Close the top cover and ensure it is latched.



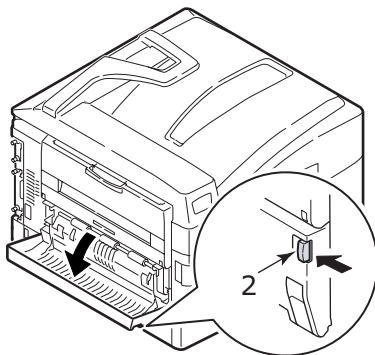
PAPER JAMS – DUPLEX UNIT

CHECK DUPLEX UNIT, PAPER JAM

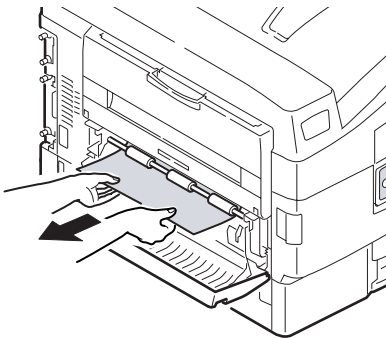
1. If a Finisher unit is attached to your printer, operate the lever (1) of the Inverter unit to separate the Inverter from the printer.



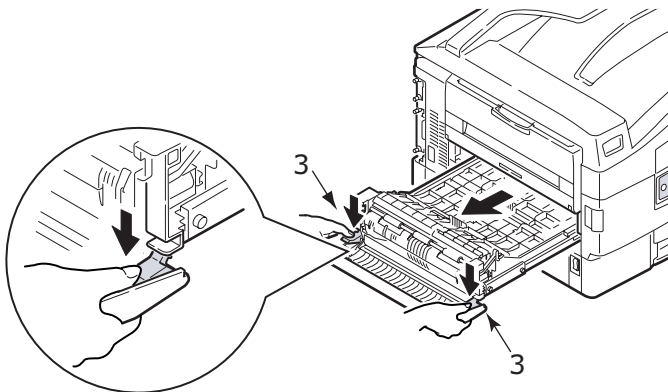
2. Operate the duplex cover release button (2) and open the cover.



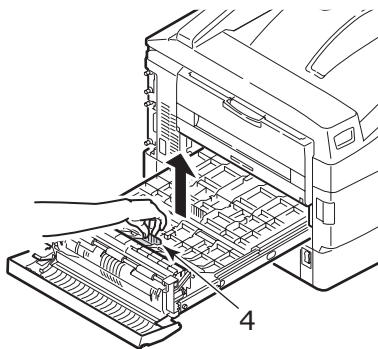
3. Carefully remove any jammed paper.



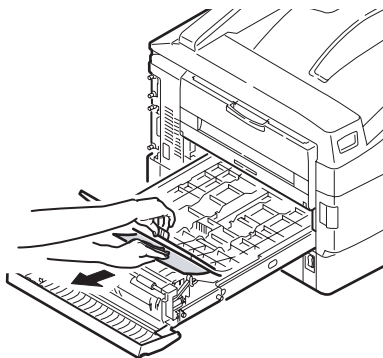
4. Operate the levers (3) and pull out the duplex unit.



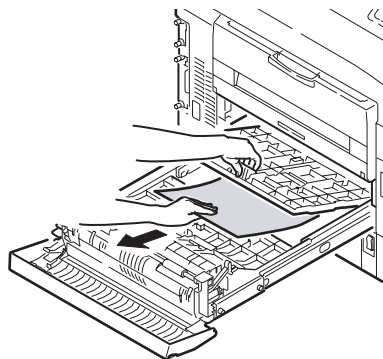
5. Holding the front top cover by the grip (4), push it gently inwards and raise it.



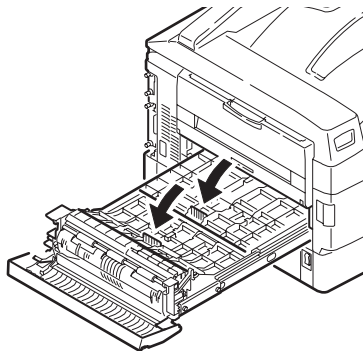
6. Remove any jammed paper.



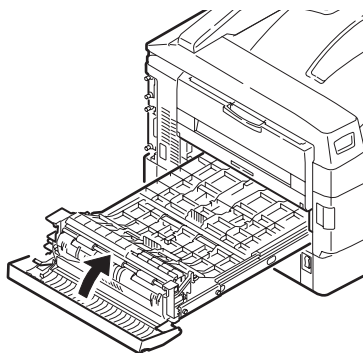
7. In similar manner, check for and clear any paper jammed under the rear top cover.



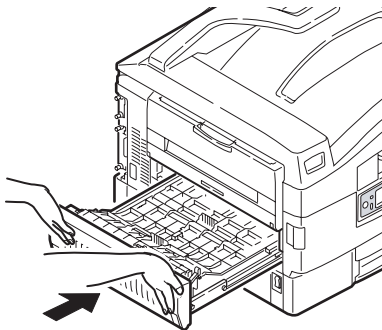
- 8.** Replace the two top covers.



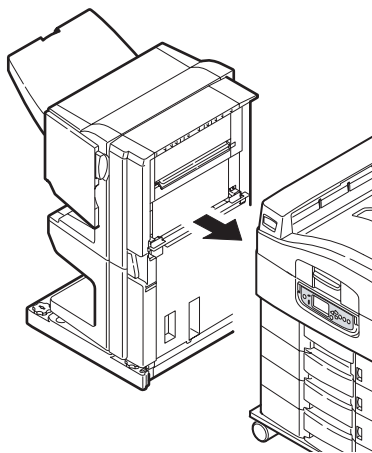
- 9.** Raise the front cover of the duplex unit.



- 10.** Push the duplex unit back into position.



- 11.** If you detached a Finisher unit to gain access to the duplex unit, replace the Finisher unit.



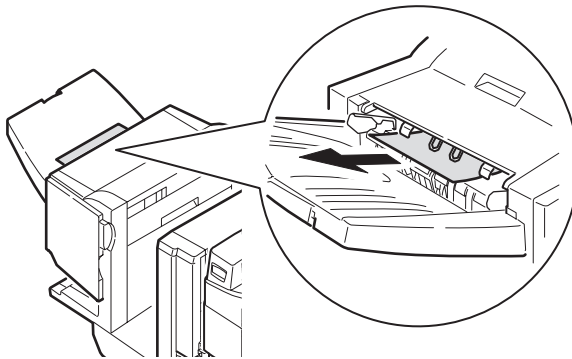
PAPER JAMS – FINISHER (OPTIONAL ACCESSORY)

CHECK FINISHER, PAPER JAM/PAPER REMAINS

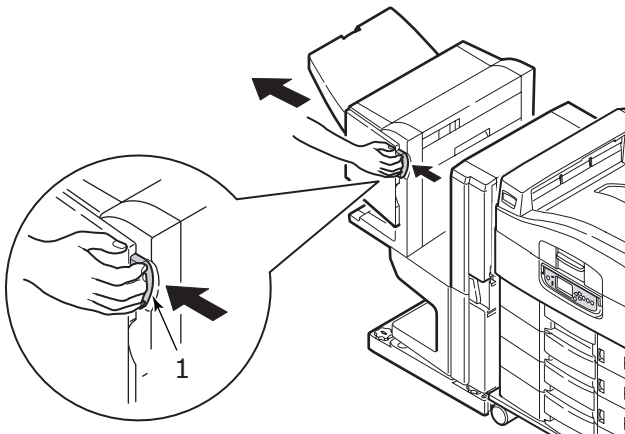
Use the Help button on the printer control panel to check the number displayed. You will need this to be able to clear the paper jam. The following paragraphs explain what to do for each of the indicated numeric codes.

591, 592, 593, 599/ 643, 645 (PAPER JAM AROUND FINISHER)

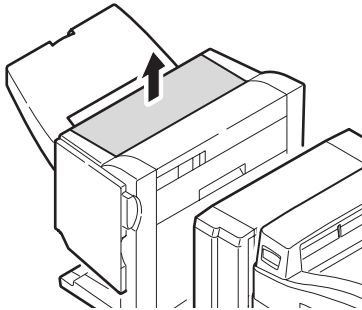
1. Remove any paper at the Finisher paper exit.



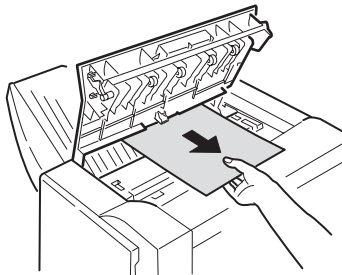
2. Operate the Finisher lever (1) and move the Finisher away from the Inverter.



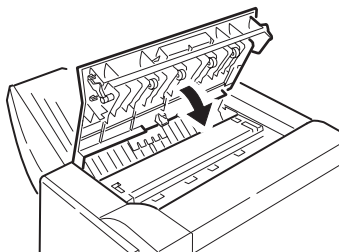
- 3.** Open the Finisher top cover.



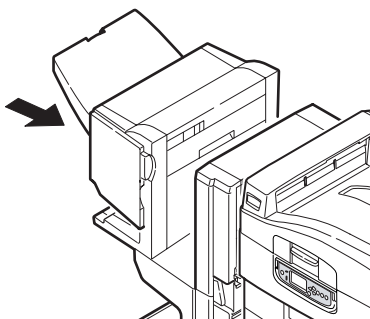
- 4.** Carefully remove any jammed paper.



- 5.** Close the Finisher top cover.

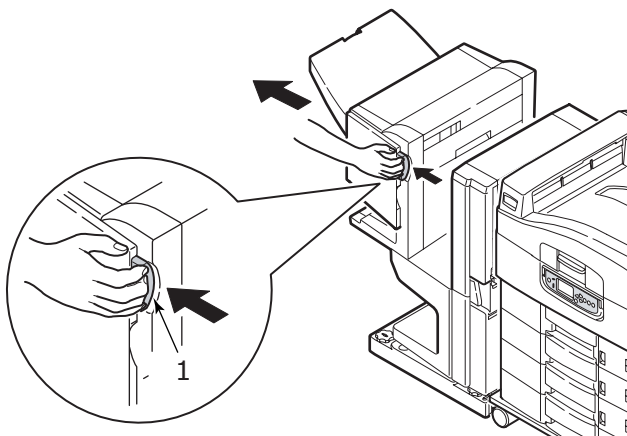


6. Move the Finisher back into position and connect it to the Inverter.

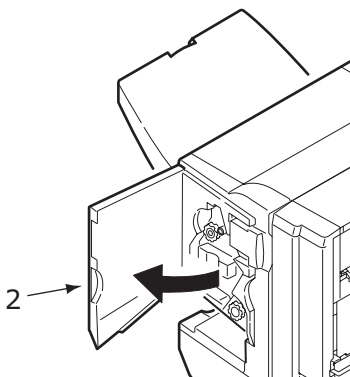


594, 597, 598/ 644, 646 (PAPER JAM IN FINISHER)

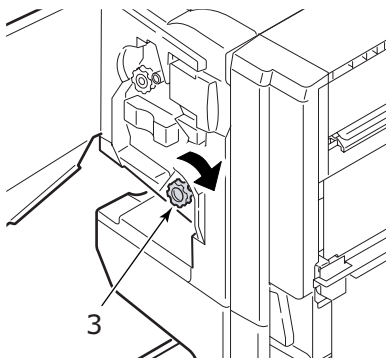
1. Operate the Finisher lever (1) and move the Finisher away from the Inverter.



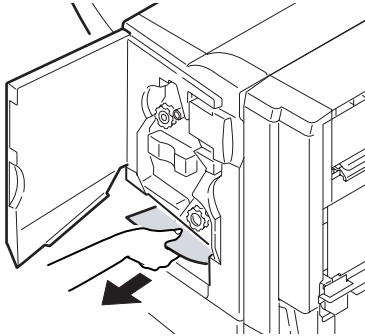
2. Open the Finisher front cover (2).



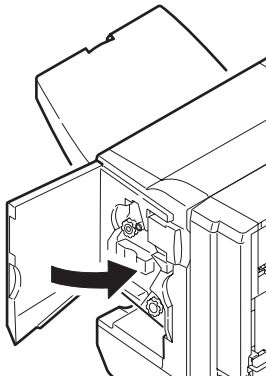
3. Continue to turn the lower knob (3) clockwise until any jammed paper is completely ejected.



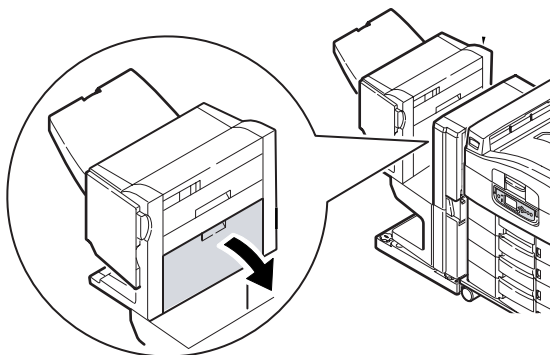
4. Remove the ejected paper.



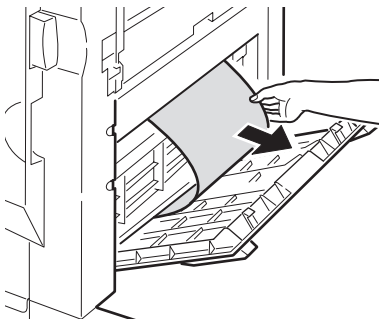
5. Close the Finisher front cover.



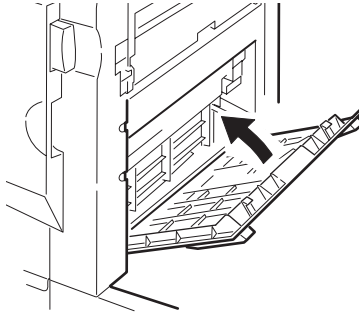
6. Open the Finisher right side cover.



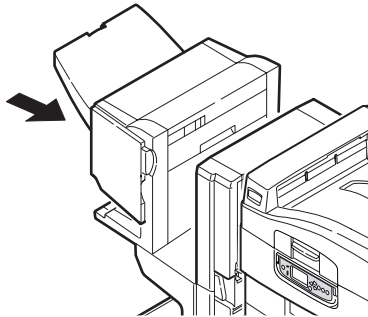
7. Carefully remove any jammed paper.



- 8.** Close the Finisher right side cover.

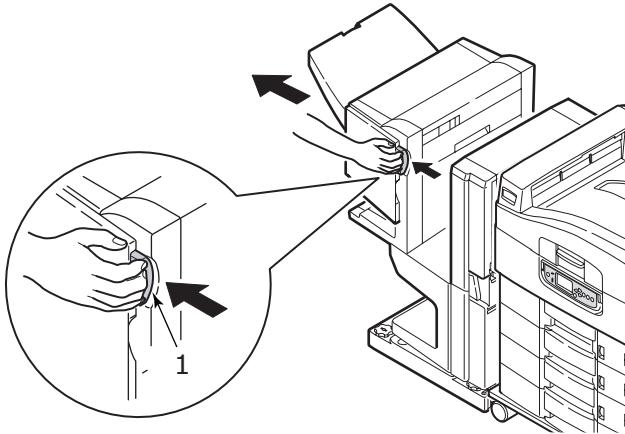


- 9.** Move the Finisher back into position and connect it to the Inverter.

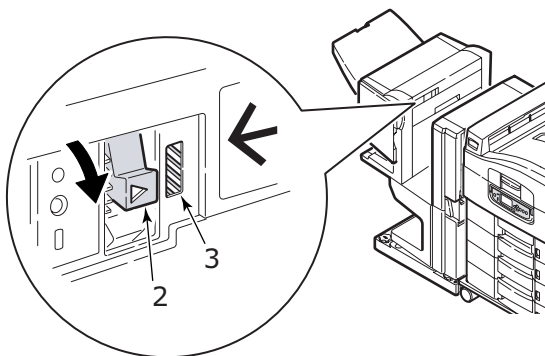


590 (PAPER JAM IN FINISHER/PUNCH UNIT)

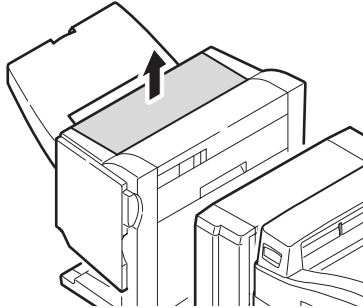
1. Operate the Finisher lever (1) and move the Finisher away from the Inverter.



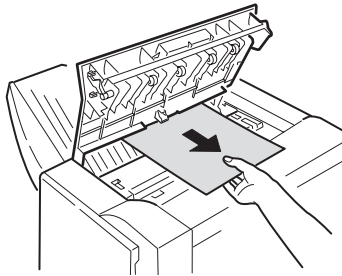
2. Move the tab (2) on the right side of the Finisher to align it with the mark (3).



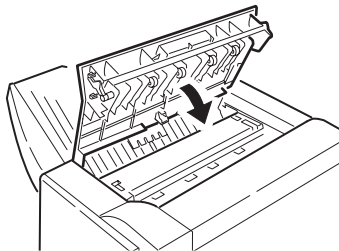
3. Open the Finisher top cover.



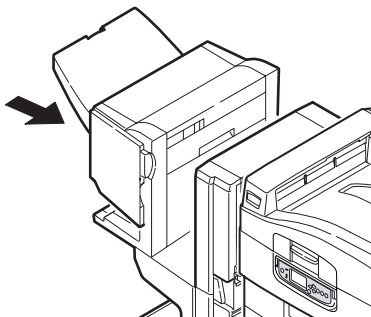
4. Carefully remove any jammed paper.



5. Close the Finisher top cover.

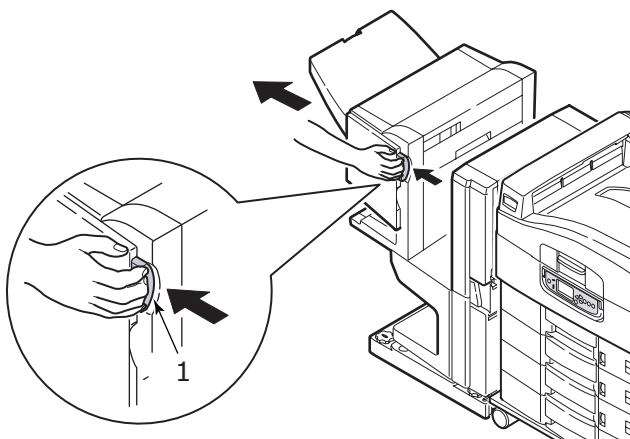


6. Move the Finisher back into position and connect it to the Inverter.

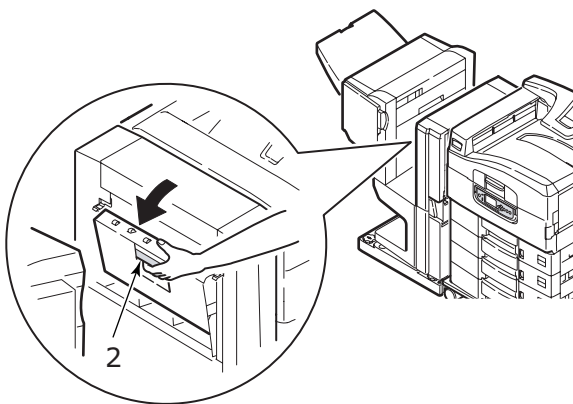


CHECK INVERTER, PAPER JAM

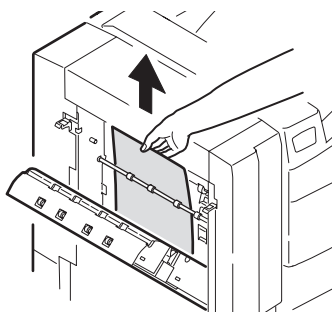
1. Operate the Finisher lever (1) and move the Finisher away from the Inverter.



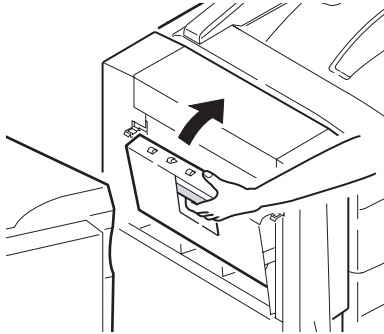
- 2.** Squeeze the recessed handle (2) and open the left side cover of the Inverter.



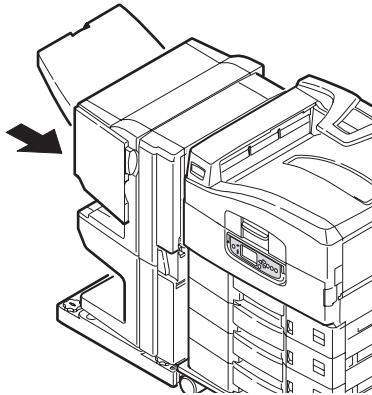
- 3.** Carefully remove any jammed paper.



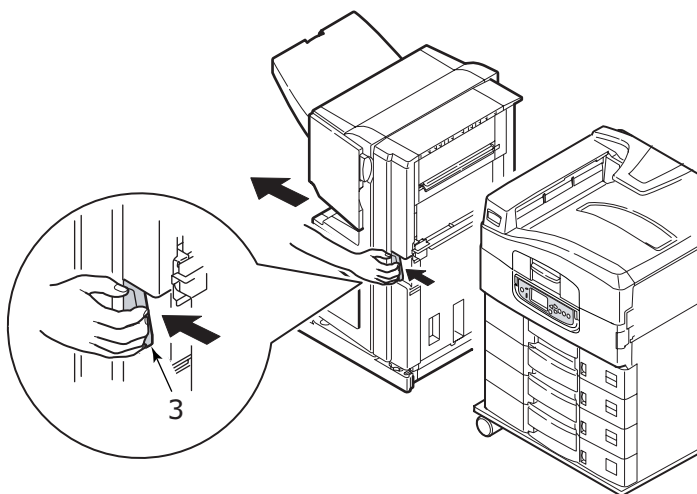
- 4.** Close the Inverter left side cover.



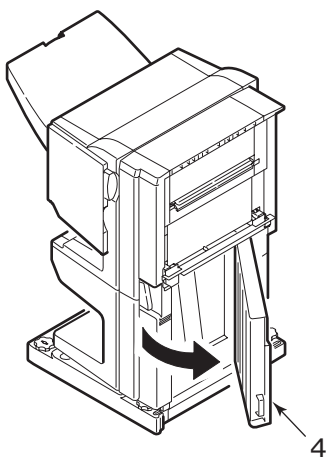
- 5.** Move the Finisher back into position and connect it to the Inverter.



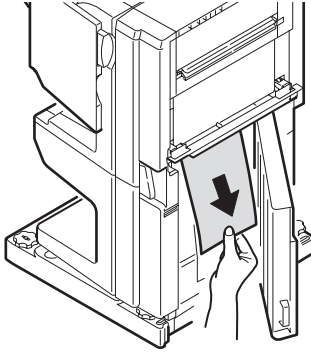
- 6.** Operate the Inverter lever (3) and separate the Inverter from the printer.



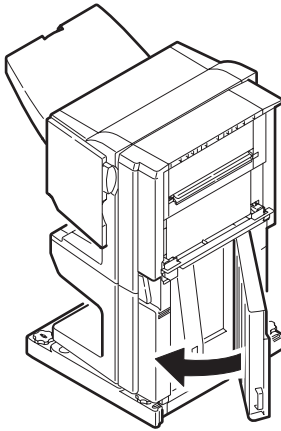
- 7.** Open the right side door (4) of the Inverter.



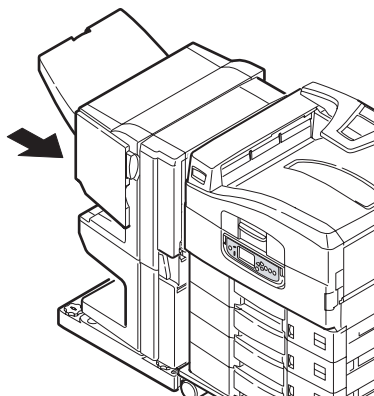
- 8.** Remove any jammed paper.



- 9.** Close the right side door.



10. Move the Finisher and Inverter back into position and connect to the printer.



AVOIDING PAPER JAMS

The following table summarizes possible causes of paper jams and suggests ways of avoiding them.

POSSIBLE CAUSE	SUGGESTED REMEDY
The printer is not level.	Place the printer on a steady, level surface.
Your print media is too light or too heavy.	Use appropriate media.
Your print media is damp or charged with static electricity.	Use media that has been stored in appropriate temperature and humidity conditions.
Your print media is creased or curled.	Use appropriate media. Decurled media can be used.
Your print media sheets are not aligned with each other.	Remove the sheets, jog them into alignment and reload them.
Your print media is not aligned properly in the paper tray.	Adjust the paper stop and paper guides of the tray, or the manual feed guide on the MP Tray to align the media properly.
Your envelopes to be printed are not oriented properly.	Adjust the orientation as required.

POSSIBLE CAUSE	SUGGESTED REMEDY
Your printer feed roller is dirty.	Wipe the roller with a cloth moistened with water.
Your printer feed rollers are wearing out.	Replace the feed rollers.
The media weight or type have been wrongly set.	Select the correct printer menu settings for [Media Weight] and [Media Type].

DEALING WITH UNSATISFACTORY PRINTING

SYMPTOMS	POSSIBLE CAUSES	STEPS TO TAKE
Vertical white lines can be seen on the printed page.	The LED head is dirty.	Wipe the LED head with a LED lens cleaner or with a soft cloth.
	The toner is low.	Replace the toner cartridge.
	Foreign materials may be present in the image drum.	Replace the image drum cartridge.
	Light-shielding film of the image drum cartridge is dirty.	Wipe the film with a LED lens cleaner or with a soft cloth.
Printed images are fading vertically.	The LED head is dirty.	Wipe the LED head with a LED lens cleaner or with a soft cloth.
	The toner is low.	Replace the toner cartridge.
	The paper is not suitable for the printer.	Use recommended paper.

SYMPTOMS	POSSIBLE CAUSES	STEPS TO TAKE
Printing is light.	The toner cartridge is not properly seated.	Reinstall the toner cartridge.
	The toner is low.	Replace the toner cartridge.
	The paper is moist.	Use paper stored in proper temperature and humidity conditions.
	The paper is not suitable for the printer.	Use recommended paper.
	Thickness and type of paper are inappropriate.	Set a proper value for [Media Weight] and [Media Type] in the menu setup, or set one value thicker for [Media Weight].
	Recycled paper is being used.	Set one value thicker for [Media Weight] in the menu setup.
Partially faded images. White spots and lines appear in solid printing.	Paper is moist or dry.	Use paper stored in proper temperature and humidity conditions.
Vertical lines appear.	The image drum cartridge is damaged.	Replace the image drum cartridge.
	The toner is low.	Replace the toner cartridge.
Horizontal Lines and spots appear periodically.	When the interval is about 94mm (4in), the image drum (the green tube) is damaged or dirty.	Wipe it lightly with a soft cloth. Replace the image drum cartridge when it is damaged.
	When the interval is about 42mm (1.5in), there may be foreign particles in the image drum cartridge.	Open/close the top cover, and print again.
	When the interval is about 87mm (3.5in), the fuser unit is damaged.	Replace the fuser unit.
	The image drum cartridge has been exposed to light.	Replace the image drum cartridge if the problem is not resolved.

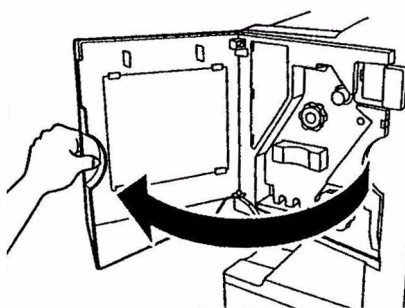
SYMPTOMS	POSSIBLE CAUSES	STEPS TO TAKE
White area of paper is lightly stained.	Paper contains static.	Use paper stored in proper temperature and humidity conditions.
	Too thick paper is used.	Use thinner paper.
	The toner is low.	Replace the toner cartridge.
Periphery of the letters is smudged.	The LED head is dirty.	Wipe the head with LED lens cleaner or with a soft cloth.
Toner comes off when it is rubbed.	The thickness and type of the paper are incorrectly set.	Set the correct value of [Media Type] and [Media Weight] in the menu setup or set one value thicker for [Media Weight].
	Recycled paper is used.	Set one value thicker for [Media Weight] in the menu setup.
Glossiness is not uniform.	The thickness and type of the paper are incorrectly set.	Set the correct value of [Media Type] and [Media Weight] in the menu setup or set one value lighter for [Media Weight].

STAPLE JAMS – FINISHER (OPTIONAL ACCESSORY)

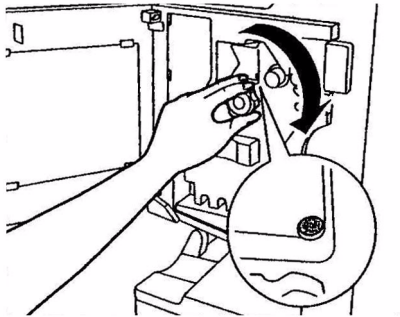
CHECK FINISHER, STAPLE JAM

When the display indicates a staple jam has occurred, clear the jam as follows:

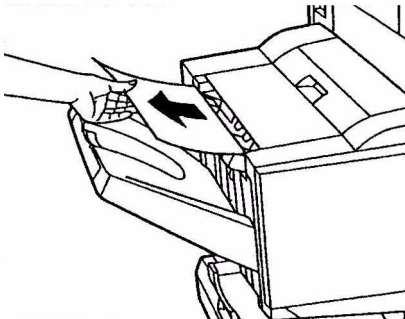
1. Open the Finisher front cover.



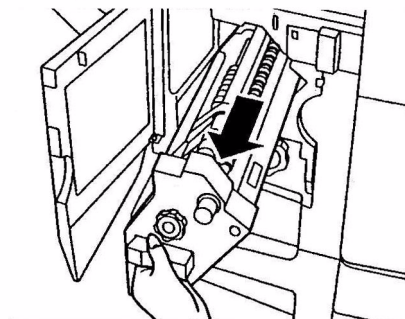
2. Turn the knob in the direction indicated until the colored indicator appears.



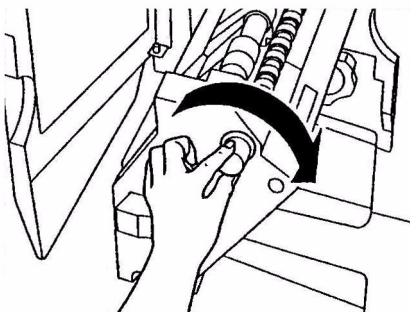
3. Remove any paper that awaits stapling in the paper ejection area.



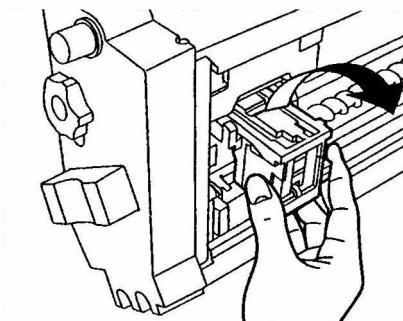
4. Pull out the staple unit.



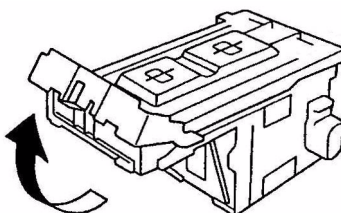
- 5.** Turn the knob in the direction indicated to move the stapler to the front.



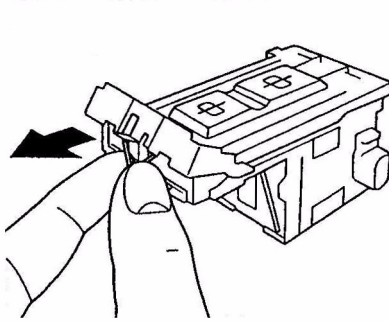
- 6.** Grip both sides of the staple cartridge, pull it up and remove it.



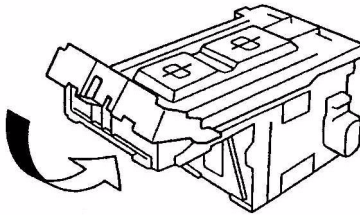
- 7.** Raise the staple cartridge gate.



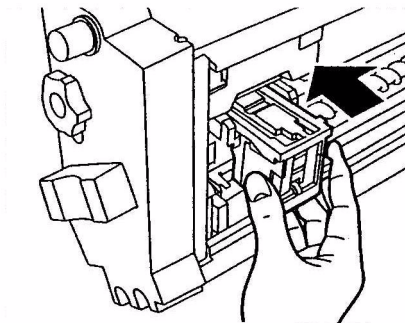
- 8.** Remove all staples that are emerging from the staple case.



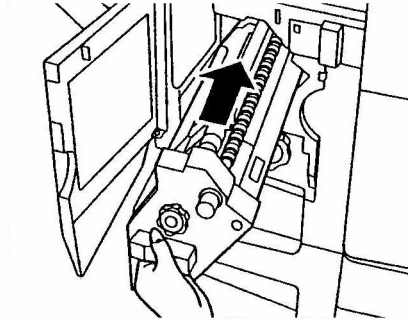
- 9.** Return the staple cartridge gate to its original position.



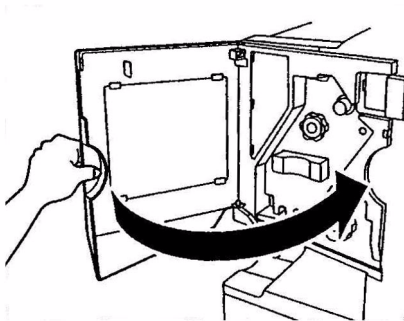
- 10.** Replace the staple cartridge.



- 11.** Ensure that the staple cartridge is securely installed back into the staple unit then push the staple unit fully home.



- 12.** Close the Finisher front cover, being careful not to trap your fingers.



SPECIFICATIONS

ITEM	SPECIFICATION
Dimensions	25.8x24.4x18.2 in (WxDxH) 655x620x462 mm (WxDxH)
Weight	Without options, 152 lb (68 kg)
Print speeds	36 ppm color; 40 ppm monochrome 20 – 28 lb paper
Resolution	1200 x 1200 dpi
Emulations	PCL 5c, PCL 6, PS3
Memory	1 GB (max.)
Paper input at 20 lb (75 g/m ²)	Trays 1 – 5: 530 sheets Letter each MP Tray: 230 sheets Letter
Paper weight	15 – 71 lb (55 – 268 g/m ²)
Paper output	Face-down stacker: 500 sheets Face-up stacker: 250 sheets
Interfaces	USB 2.0, 10Base-T and 100Base-TX
Duty cycle	150,000 pages/month maximum
Toner life Black Toner life C,M,Y	18,500 Letter pages @ 5% coverage 16,500 Letter pages @ 5% coverage
Image drum life	42,000 Letter pages
Belt life	100,000 Letter pages
Fuser life	100,000 Letter pages
Waste toner bottle life	30,000 Letter pages
Power rating	110 – 127 VAC, 60 Hz 230 VAC, 50 Hz +/- 2Hz
Power consumption	Operating: 1,500 W maximum, 750 W typical Standby: 1,300 W maximum, 200 W typical Power save: <45 W
Operating environment	Operating: 50 – 90°F/20 – 80%RH Off: 32 – 110°F/10 – 90%RH

ITEM	SPECIFICATION
Noise level	Operating: 53dBA maximum Standby: 40dBA maximum Power save: 40dBA maximum after 30 mins background level

APPENDIX A – DISPLAY PANEL MESSAGES

The display panel messages are intended to be self-explanatory. Representative messages are given as examples below.

MESSAGE	COMMENT
Ready to Print	Your printer is online and ready to print.
Printing tttttt	Your printer is printing and paper is currently being fed from tttttt, where tttttt identifies a tray.
tttttt Near End	The paper supply in the tray identified by tttttt will run out soon.
ccccc Toner Low	The remaining toner of color ccccc is running low.
Fuser Unit Near Life	The fuser unit is nearing the end of its working life.
Change Fuser Unit	The fuser unit has reached the end of its working life and has to be changed.
Inverter is Removed	The Inverter unit has been separated from the printer and all Finisher functions are disabled. (Finisher/Inverter is an optional accessory.)
Invalid Data Press ONLINE Button	Invalid data has been received by the printer. Press the ONLINE button to clear this warning.
Change Paper in tttttt mmmmmm pppppp Press ONLINE button Please see HELP for details	There is a mismatch between the media in the tray and print data. Load media of size mmmmmm and type pppppp into tray tttttt. The message may remain for some time after you have closed the tray. You can have the printer ignore this error for the current print job by pressing the ONLINE button. You can access help details by pressing the HELP button.
Install Paper tttttt mmmmmm Please see HELP for details	The printer has tried to take paper from an empty tray. Load media of size mmmmmm into tray tttttt. The message may remain for some time after you have closed the tray. You can access help details by pressing the HELP button.
Install Tray tttttt	The printer has tried to take paper from a tray that has been removed. Ensure that tray tttttt is correctly located or put tray tttttt loaded with paper back into the printer.

MESSAGE	COMMENT
Open Cover Paper Remains ttttt Please see HELP for details	Additional paper has been detected after a paper jam has been cleared. Open ttttt side cover to check for additional paper. You can access help details by pressing the HELP button.
Check Image Drum cccccc Please see HELP for details	Check that the image drum of color cccccc is correctly installed. You can access help details by pressing the HELP button.

APPENDIX B – MENU SYSTEM

The top-level Functions menus are:

- > Configuration
- > Print Pages
- > Suspend Printing
- > Resume Printing
- > Print Secure Job
- > Menus
- > Shutdown
- > Admin Setup
- > Calibration
- > Print Statistics

The other special top-level menu is:

- > System Maintenance

The following tables summarize the Configuration, Print Pages, Print Secure Job and Menus menu trees and provide some usage examples. The menu trees are given to the lowest menu item level. Typically, this can be a parameter that can be set by selecting from a range of values provided or a command that can be executed to display or print a status or setting value.

Emboldened values followed by an (A) denote default values associated with locations where A4 is default paper size.
Emboldened values followed by an (L) denote default values associated with locations where Letter is default paper size.
Emboldened values followed by neither (A) nor (L) denote common defaults.

Certain menus and items associated with, for example, the Finisher appear only if the associated hardware is installed or under certain conditions.

The remainder of the menus above are intended for more specialized usage and are not described further here.

CONFIGURATION

PRINT PAGE COUNT

ITEM	VALUE	DESCRIPTION
Color Page	nnnnnn	Displays number of color printed pages converted to Letter equivalent.
Monochrome Page	nnnnnn	Displays number of monochrome printed pages converted to Letter equivalent.
Traym	nnnnnn	Displays total printed pages from Traym, where m is in range 1 to 5.
MP Tray	nnnnnn	Displays total printed pages from MP tray.

FINISHER COUNT

ITEM	VALUE	DESCRIPTION
Staple	nnnnnn	Displays total pages stapled.
Punch	nnnnnn	Displays total pages punched.
Finisher	nnnnnn	Displays total pages ejected into the Finisher.

SUPPLIES LIFE

ITEM	VALUE	DESCRIPTION
xxxx Drum	Remaining nnn%	Displays the remaining life span of the xxxx drum as a percentage where xxxx can be Cyan, Magenta, Yellow, Black.
Belt	Remaining nnn%	Displays the remaining life span of the belt unit as a percentage.
Fuser	Remaining nnn%	Displays the remaining life span of the fuser unit as a percentage.
xxxx Toner (n.nK)	Remaining nnn%	Displays the remaining life span of xxxx toner as a percentage, where xxxx can be Cyan, Magenta, Yellow, Black. (n.nK) indicates the capacity of the toner cartridge being used.

PAPER SIZE IN TRAY

ITEM	VALUE	DESCRIPTION
Traym where m is in range 1 to 5 (similar arrangement for all trays)	Executive Letter Short Edge Letter Long Edge Legal 14 Legal 13.5 Tabloid Tabloid Extra Legal 13 A6 A5 A4 Short Edge A4 Long Edge A3 A3 Nobi A3 Wide B5 Short Edge B5 Long Edge B4 Postcard Double Postcard Custom	Displays detected paper size of Traym.
MP Tray	Similar to values for Traym	Displays detected paper size of the MP Tray.

SYSTEM

ITEM	VALUE	DESCRIPTION
Serial Number	xxxxxxxxxxxxxxxx	Displays serial no. of the printer.
Asset Number	xxxxxxx	Displays Asset Number. Asset Number is 8 alphanumeric characters that can be assigned by a user. Same as Asset Number of Menu Map.
CU Version	xx.xx	Displays version no. of CU (Control Unit) firmware. Same as CU version of Menu Map.
PU Version	xx.xx.xx	Displays version no. of PU (Print Unit) firmware. Same as PU version of Menu Map.

ITEM	VALUE	DESCRIPTION
Total Memory	xx MB	Displays total RAM memory installed in the printer. Same as Total Memory of Menu Map.
HDD	xx.xx GB [Fxx]	Displays size of hard disk and file system version. Same as HDD of Menu Map.

CONFIGURATION EXAMPLE – MONOCHROME PAGES PRINTED

To display the total monochrome pages printed so far (remembering that a duplex page counts as two pages):

1. Ensure that the display panel indicates that the printer is ready to print.
2. Enter menu mode by pressing either the **Up-arrow** or **Down-arrow** button and press them repeatedly until the Configuration menu is highlighted.
3. Press the **Enter** button to select this menu.
4. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Print Page Count is highlighted.
5. Press the **Enter** button to select this Item.
6. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Monochrome Page is highlighted.
7. Press the **Enter** button and the monochrome page count is displayed.
8. Press the **Online** button to exit menu mode and return to the ready to print status.

PRINT PAGES

ITEM	VALUE	DESCRIPTION
PS Test Page	Execute	Prints the PostScript sample page.
Configuration	Execute	Prints printer configuration details.
Job Log	Execute	Prints EFI job log details.
Color Charts (disk only)	Execute	Prints colour charts.
PS Font List	Execute	Prints PostScript font list.
PCL Font List	Execute	Prints PCL emulation font list.
Demo Page	Execute	Prints a demo page.
Usage Report	Execute	Prints usage report.
Statistics Log	Execute	Prints Oki job log details.
Error Log	Execute	Prints the error log.
E-mail Log	Execute	Prints e-mail log.
PrintMe Log	Execute	Prints PrintMe Log.

PRINT INFORMATION EXAMPLE – DEMONSTRATION PAGE

To print a printer demo page to demonstrate how your printer prints:

1. Ensure that the display panel indicates that the printer is ready to print.
2. Enter menu mode by pressing either the **Up-arrow** or **Down-arrow** button and press them repeatedly until the Print Pages menu is highlighted.

3. Press the **Enter** button to select this menu.
4. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Demo page is highlighted.
5. Press the **Enter** button to select this Item and the demo page is printed.
6. After printing, the printer returns to ready to print status.

PRINT SECURE JOB

ITEM	VALUE	DESCRIPTION
Enter Password	nnnn	Enter a password to use secure printing.
Not Found		Use a secure printing job (Secure Job) or a job Stored to HDD when printing. When you print a Secure document, it is deleted from the HDD. When you print a document Stored to HDD, it prints and remains stored on the HDD until you manually delete it. Not Found: (no jobs) is indicated when there is no output file. The following messages are displayed when there are printable files. Print: When you select Print, Set Collating Amount is displayed to enable you to specify a number of copies. After specifying the number of copies, press Enter to print all jobs with the specified number of copies. Delete: When you select Delete, you are prompted to recheck by Yes/No display, and selecting Yes deletes all jobs.
Secure Job	Print Delete	

MENUS

TRAY CONFIGURATION

ITEM	VALUE		DESCRIPTION
Paper Feed	Tray1 Tray2 Tray3 Tray4 Tray5 MP Tray		Specifies a feed tray. Indicated only when Tray2–5 implemented.
Auto Tray Switch	ON OFF		Sets the automatic tray switch function.
Tray Sequence	Down Up Paper feed tray		Specifies selection order priority for automatic tray selection/automatic tray switch.
Unit of Measure	Inch (L) mm (A)		Specifies units for custom paper size.
Traym Config, where m is in range 1 to 5 (similar arrangement for all trays)	Paper Size	Tray Size Custom	Sets paper in Traym.
	X Dimension	3.9 – 8.3 (A) – 8.5 (L) – 12.9 inch 100 – 210 (A) – 216 (L) – 328 mm	Sets Custom paper width for Traym. Sets for the direction perpendicular to the direction of paper movement.
	Y Dimension	5.8 – 11 (L) – 11.7 (A) – 18 inch 148 – 279 (L) – 297 (A) – 457 mm	Sets Custom paper length for Traym. Sets for the same direction as paper movement.
	Media Type	Plain Letterhead Transparency Bond Recycled Card stock Rough Glossy User Type1 User Type2 User Type3 User Type4 User Type5	Sets the media type for Traym. User Type1 to User Type5 are reserved for custom paper sizes set in the printer driver.

ITEM	VALUE		DESCRIPTION
Traym Config, where m is in range 1 to 5 (similar arrangement for all trays)	Media Weight	Auto Light Medium Light Medium Medium Heavy Heavy Ultra Heavy 1 Ultra Heavy 2 Ultra Heavy 3	Sets media weight for Traym.
	A3 Nobi Paper	A3 Nobi A3 Wide Tabloid Extra	The printer detects A3 Nobi, A3 Wide and Tabloid Extra sizes as the same. Use this setting to tell the printer which of the three sizes is loaded in Traym.
	Legal 14 Paper	Legal 14 Legal 13.5	Sets the length of the legal paper in Traym. Change this to Legal 13.5 if that is the standard legal size in your country.
	A5/A6 Paper	A5/A6 Postcard	The printer detects A5, A6 and Postcard sizes as the same. Use this setting to tell the printer which of the three sizes is loaded in Traym.

ITEM	VALUE		DESCRIPTION
MP Tray Config	Paper Size	A3 Nobi A3 Wide A3 A4 Sht Edge A4 Long Edge (A) A5 A6 B4 B5 Short Edge B5 Long Edge Legal 14 Legal 13.5 Tabloid Extra Tabloid Letter Sht Edge Letter Long Edge (L) Executive Custom Com-9 Envelope Com-10 Envelope Monarch Envelope DL Envelope Landscape Postcard Double postcard C5 C4 Envelope Index Card	Sets paper size for MP Tray.
	X Dimension	3 – 8.3 (A) – 8.5 (L) – 12.9 inch 76 – 210 (A) – 216 (L) – 328 mm	Sets Custom paper width for the MP Tray. Sets for the direction perpendicular to the direction of paper movement.
	Y Dimension	3.5 – 11.0 (L) – 11.7 (A) – 47.2 inch 90 – 279 (L) – 297 (A) – 1200 mm	Sets Custom paper length for MP Tray. Sets for the same direction as paper movement.

ITEM	VALUE		DESCRIPTION
MP Tray Config	Media Type	Plain Letterhead Transparency Labels Bond Recycled Card stock Rough Glossy Envelope User Type1 User Type2 User Type3 User Type4 User Type5	Sets the media type for MP Tray.
	Media Weight	Auto Light Medium Light Medium Medium Heavy Heavy Ultra Heavy 1 Ultra Heavy 2 Ultra Heavy 3	Sets the media weight for MP Tray.
	Tray Usage	Normal Tray	Tray selection/switching uses this tray as the normal tray.
		When Mismatching	If a paper size or type in a tray is not matched to that of the print data, use paper from this tray instead of the specified tray.
		Do Not Use	Makes the MP tray unavailable in auto tray selection/switching.

SYSTEM ADJUST

ITEM	VALUE	DESCRIPTION
Power Save Time	5 min 15 min 30 min 60 min 240 min	Sets the period after which power save mode starts.
Clearable Warning	Online Job	When Online is selected, you must manually clear the warning by pressing the Online button. Change to Job if you wish the message to automatically clear when a new print job is received.
Auto Continue	ON OFF	Sets whether the printer is automatically recovered when Memory Overflow or Tray Request occurs.
Manual Timeout	OFF 30 sec 60 sec	If paper is not fed within this time in manual feed, the job is cancelled.
Wait Timeout	OFF 5 sec 10 sec 20 sec 30 sec 40 sec 50 sec 60 sec 90 sec 120 sec 150 sec 180 sec 210 sec 240 sec 270 sec 300 sec	Sets the time period between stopping receipt of job data and forced print. For PS, printing is not carried out and the job is cancelled.

ITEM	VALUE		DESCRIPTION
Low Toner	Continue Stop		Sets the printing operation when insufficient toner is detected. Continue: the printer can continue printing while remaining online. Stop: the printer stops printing and goes offline.
Jam Recovery	ON OFF		ON: continues printing the job, including any jammed pages, once the jam has been cleared. OFF: Cancels a job including the page currently jammed.
Print Position Adjust	X Adjust	0.00 +0.25 - +2.00 -2.00 - -0.25 mm 0.00 +0.01 - +0.08 -0.08 - -0.01 in	Adjusts the position of the whole printing image (0.25 mm, 0.01 in interval) perpendicular to the direction of paper movement (i.e. horizontally).
	Y Adjust	0.00 +0.25 - +2.00 -2.00 - -0.25 mm 0.00 +0.01 - +0.08 -0.08 - -0.01 in	Adjusts the position of the whole printing image (0.25 mm, 0.01 in interval) parallel to the direction of paper movement (i.e. vertically).

ITEM	VALUE		DESCRIPTION
Print Position Adjust	Duplex X Adjust	0.00 +0.25 – +2.00 -2.00 – -0.25 mm 0.00 +0.01 – +0.08 -0.08 – -0.01in	During the flip-side printing of duplex printing, adjusts the location of the whole printing image (0.25 mm, 0.01in interval) perpendicular to the direction of paper movement (i.e. horizontally).
	Duplex Y Adjust	0.00 +0.25 – +2.00 -2.00 – -0.25 mm 0.00 +0.01 – +0.08 -0.08 – -0.01 in	During the flip-side printing of duplex printing, adjusts the location of the whole printing image (0.25 mm, 0.01 in interval) parallel to the direction of paper movement (i.e. vertically).
xxxx Darkness	0 +1 – +3 -4 – -1		Adjusts the xxxx engine density where xxxx is one of Cyan, Magenta, Yellow, Black. Darkest value is +3.
xxxx Reg Fine Adjust	0 +1 – +3 -3 – -1		Makes fine adjustment to image registration in xxxx against Black in the horizontal direction, where xxxx is one of Cyan, Magenta, Yellow. If the paper movement direction is upward, a value set on the plus side, means the image relatively moves downward.

ITEM	VALUE		DESCRIPTION
Paper Black Setting	0 +1 - +2 -2 - -1		Used for micro adjustment when very visible faded print results or light specks (or streaks) result when printing in Plain Paper/Black setting. Decrease the value if light specks (or streaks) or snow flake like printing results in high density print areas.
Paper Color Setting	0 +1 - +2 -2 - -1		Used for micro adjustment when very visible faded print results or light specks (or streaks) result when printing in Plain Paper/Color setting. Decrease the value if light specks (or streaks) or snow flake like printing results in high density print areas
Transparency Black Setting	0 +1 - +2 -2 - -1		As for Paper Black Setting above.
Transparency Color Setting	0 +1 - +2 -2 - -1		As for Paper Color Setting above.
Drum Cleaning	ON OFF		Set to produce idling of a drum before printing in order to reduce horizontal white lines. This shortens image drum life.
Hex Dump	Execute		Prints out the data received from the host PC in hexadecimal code.

MENUS EXAMPLE 1 – TRAY 1 TRANSPARENCIES

To print on transparencies (accommodated in Tray1):

1. Ensure that the display panel indicates that the printer is ready to print.
2. Enter menu mode by pressing either the **Up-arrow** or **Down-arrow** button and press them repeatedly until the Menus menu is highlighted.
3. Press the **Enter** button to select this menu.
4. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Tray Configuration is highlighted.
5. Press the **Enter** button to select this Item.
6. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Tray1 Config is highlighted.
7. Press the **Enter** button to select this Item.
8. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until MediaType is highlighted.
9. Press the **Enter** button to select this Item.
10. Press the **Up-arrow** or **Down-arrow** buttons repeatedly to move through the range of media types until Transparency is highlighted.
11. Press the **Enter** button to select this value.
12. Check that an asterisk (*) appears beside Transparency.
13. Press the **Online** button to exit menu mode and return to the ready to print status.

MENUS EXAMPLE 2 – MP TRAY PAPER SIZE

To set paper size in the MP Tray:

1. Ensure that the display panel indicates that the printer is ready to print.
2. Enter menu mode by pressing either the **Up-arrow** or **Down-arrow** button and press them repeatedly until the Menus menu is highlighted.
3. Press the **Enter** button to select this menu.
4. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Tray Configuration is highlighted.
5. Press the **Enter** button to select this Item.
6. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until MP Tray Config is highlighted.
7. Press the **Enter** button to select this Item.
8. Press the **Up-arrow** or **Down-arrow** buttons repeatedly until Paper Size is highlighted.
9. Press the **Enter** button to select this Item.
10. Press the **Up-arrow** or **Down-arrow** buttons repeatedly to move through the range of paper sizes until the required size is highlighted.
11. Press the **Enter** button to select this value.
12. Check that an asterisk (*) appears beside the chosen size.
13. Press the **Online** button to exit menu mode and return to the ready to print status.

OKI SERVICE CENTERS

AUTHORIZED SERVICE PROVIDERS

Oki Data has over 2,000 local Authorized Service Providers in North and South America.

For the most comprehensive, up-to-date listing of Oki Data authorized Service Centers:

Consult our web site at
www.okidata.com

In the U.S. and Canada, call 1 800 654 3282 (1 800 OKI-DATA)

In Latin America, contact the Latin America Service Coordinator at Oki Data's Corporate Headquarters at 856-222-5276 / 856-222-7496 (Spanish only).

OKI DATA CONTACT LOCATIONS

United States

Phone: 1-800-654-3282 (USA and Canada only)

Fax: 1-856-222-5247

Canada

Phone: 1-800-654-3282 (USA and Canada only)

Fax: 1-905-238-4421

Mexico

Visit nuestro sitio Web multilingue:
www.okiprintingsolutions.com

Favor llamar al:

- 52-555-263-8780 (Oki Data de México, S.A. de C.V.)
- 1-856-222-7496 (solo en Español)

Brazil

- Ligue para 0800-11-55-77 (central de atendimento)
- e-mail: okidata@okidata.com.br